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A Revisional Study of Japanese Longicornia
I. Genus *Epania* PASCOE (Molorchini)

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日本産カミキリの再検討 I. *Epania* 属

高桑 正敏

ABSTRACT. The Japanese members of the genus *Epania* PASCOE, hitherto classified into 5 species and 3 subspecies, are rearranged into 4 species and 2 subspecies, which include a new species from the Ryukyus. *Molorchoepania* PIC, reduced to a subgenus of *Epania* by GRESSITT and RONDON (1970), is regarded herewith as a full genus.

Genus *Epania* PASCOE

Epania PASCOE, 1858, Trans. ent. Soc. Lond., (2), **4**: 237 (type-species: *Odontocera? singaporensis* THOMSON, 1857); HAYASHI, 1950, Ent. Rev. Japan, **5**: 1; GRESSITT, 1951, Longicornia, **2**: 168; GRESSITT & RONDON, 1970, Pacif. Ins. Monogr., (24): 111.

Body clothed with erect or semierect long hairs; underside partially with whitish or yellowish pubescent marks, which can often be regarded as one of the principal characteristics of specific classification. Antennal segments 3–11 densely clothed with minute pubescence. Pronotum with pubescent bands behind apex and before base, the latter of which sometimes disappears.

Antenna 11-segmented; 3 nearly equal in length to 1. Pronotum coarsely, almost uniformly punctured except for anterior marginal area, lacking any swelling or callosity, constricted both behind apex (weakly) and before base. Scutellum tongue-shaped, wider than long. Elytra very short, not covering abdomen, usually wider than long; apex separately rounded. Hind tarsal segment 1 nearly equal in length to 2 and 3 combined, though rarely a little longer than the latter.

Though GRESSITT and RONDON (1970) regarded *Molorchoepania* PIC (1949, Échange, (65): 9, type-species: *M. barbieri* PIC, 1949) as a subgenus of *Epania*, it had better be considered as an independent genus as was already pointed out by HAYASHI (1974). Judging mainly from Japanese and Taiwanese species, it differs from *Epania* in the following respects: 1) antennal segments 5–11 densely clothed with minute pubescence (3–11 in *Epania*), 3 about 1.5 times as long as 1 (almost equal to or shorter than 1 in *Epania*), 2) pronotum rather finely granulate (very coarsely punctate in *Epania*), lacking pubescent band and not constricted behind apex (with pubescent band and weakly constricted in *Epania*), 3) abdominal segment 1 as long as or slightly longer than 2 (clearly longer in *Epania*), 4) hind tarsal segment 1 distinctly, about twice, longer than 2 and 3 combined (nearly equal to or occasionally a little longer than the latter in *Epania*), and so on.

Key to the Japanese Species of *Epania*

1. Antenna of male extending beyond apex of posterior femur, nearly cylindrical, each apex not angulate; 4th abdominal segment partially clothed with whitish pubescence ········ 2

— Antenna of male not extending beyond apex of posterior femur, 4-10th segments depressed, each more or less angulate at outer apex; 4th abdominal segment almost entirely clothed with silvery white pubescence ········ *iriei* sp. nov.

2. Pronotum with whitish bands in front and behind; terminal segment of antenna in male more than 0.8 times as long as the penultimate, with its apical portion arcuate or bent; that in female rounded or weakly projecting at the tip ········ 2

— Pronotum only with whitish band behind apex; terminal segment of antenna in male nearly straight, about 0.6 times as long as the penultimate; that in female acutely projecting at the tip ········ *septemtrionalis*

3. Terminal segment of antenna in male a little longer than the penultimate, with arcuate apical portion; latero-apical parts of 1st abdominal segment clothed with whitish pubescence; hind femur abruptly clavate ········ *shikokensis*

— Terminal segment of antenna in male a little shorter than the penultimate, with the apical portion appendiculate and bent; latero-apical parts of 1st abdominal segment without whitish pubescence; hind femur gradually clavate ········ *dilaticornis*

Epania septemtrionalis HAYASHI (figs. 1a-1g)

Epania septemtrionale HAYASHI, 1950, Ent. Rev. Japan, **5**: 3, fig. 1.

Epania septemtrionalis: HAYASHI, 1950, Ent. Rev. Japan, **5**: 72; OHBAYASHI, 1963, Icon. Ins. Japon. Col. nat. ed., **2**: 287, pl. 144, fig. 12; KOJIMA & HAYASHI, 1969, Insects' Life in Japan, **1**: 59, pl. 18, fig. 23; KUSAMA, 1973, List Ecol. & Dist. Jap. Ceramb.: 52; NAKANE, 1976, Nat. & Ins., Tokyo, **11**(6): 4.

Male. Body shiny black; mouth-parts, antennae and legs excepting blackish corpulent parts of femora reddish brown to dark brown. Antenna surpassing apex of hind femur by base of 9th segment; segments 2-11 nearly cylindrical; scape about 1.2 times as long as 3rd; 5th segment about 6 times as long as wide; terminal segment short and nearly straight, about 0.6 times as long as the penultimate. Pronotum widest behind middle, feebly attenuate towards apex, with whitish pubescent band behind apical margin, but without whitish band before basal margin. Elytra about 1.3 times as wide as long, widest at basal 1/3, strongly attenuate posteriad, with apex separately, broadly rounded; disc somewhat sparsely punctured, with an oblique longitudinal concavity at the median part of each elytron. Each abdominal segment with a pair of whitish pubescent marks near the postero-lateral margin; segment 1 with another pair of similar marks at the postero-lateral parts; these marks sometimes extend dorso-ventrally, and on segment 1, merge each other to form an arcuate mark on each side. Hind femora abruptly clavate.

Female. Antennae reaching 2nd abdominal segment; each segment broader than in male;

terminal segment slightly longer than the penultimate, acutely projecting at the tip.

Body length: 8.0–11.0 mm.

Specimens examined. 1♂, Nakatsuchi, Otari-son, Nagano Pref., Honshu, 25. Ⅶ. 1972, M. NAGAI leg.; Akasai, Shiso-gun, Hyogo Pref., Honshu: 1♀, 1. Ⅶ. 1973, H. HATANAKA leg., 1♀, 8. Ⅶ. 1973, H. HATANAKA leg., 1♂, 3. Ⅶ. 1977, M. TOHYAMA leg.; 1♀, Mt. Takahachi, Tottori Pref., Honshu, 20. Ⅶ. 1975, O. YAMAJI leg.

Range. Honshu, Shikoku and Kyushu.

This species is rarely collected on flowers of *Castanea crenata* SIEB. et ZUCC., *Hydrangea paniculata* SIEB., etc.

Epania shikokensis **OHBAYASHI** (figs. 2a–2j)

Epania shikokensis OHBAYASHI, 1936, Trans. Kansai ent. Soc., (7): 13, pl. 11, fig. 3.

Male. Body shiny black, with steel, golden green or greenish blue or indigo-blue tint on elytra; mouth-parts, antennae and large parts of legs reddish brown to reddish black; basal parts of hind femora usually ivory-yellow, but rarely reddish black. Antenna semicylindrical, surpassing apex of hind femur by 10th segment, more or less corpulent near each apex in segments 3–8; scape about as long as 3rd segment; 5th segment about 3.6–3.8 times as long as wide; terminal segment longer than the penultimate, with its apical portion arcuate. Pronotum usually widest behind middle, attenuate towards apex, with whitish pubescent bands behind apical and before basal margins. Elytra most transverse of the members of Japanese *Epania*, about 1.3–1.45 times as wide as long, broadest at about basal 1/3, gradually attenuate posteriorly, with apex separately, widely rounded; disc somewhat densely or sparsely punctured, often with irregular rugosities, and with a shallow oblique concavity at the post-median part of each elytron. Abdomen with clear whitish pubescent marks as follows: segment 1 with a pair of arcuate ones near the posterior and lateral margins; each of segments 2–4 with a pair of transverse oval ones near the postero-lateral margin, these marks occasionally extending dorso-ventrally. Hind femora abruptly clavate.

Female. Antennae not reaching 2nd abdominal segment; each segment wider than in male; scape a little shorter than 3rd; terminal segment as illustrated.

Body length: 5.7–9.0 mm.

Two subspecies are recognized as shown below:

1. Elytra with steel, golden green or greenish blue tint; terminal segment of antenna in female longer than the penultimate; abdominal whitish marks relatively less developed……………………………………subsp. *shikokensis*

— Elytra with steel indigo-blue tint; terminal segment of antenna in female about as long as the penultimate; abdominal whitish marks well developed…………………………………………………………………subsp. *maruokai*

Subsp. ***shikokensis*** **OHBAYASHI**

Epania shikokensis shikokensis: KOJIMA & HAYASHI, 1969, Insects' Life in Japan, **1**: 59, pl. 18, fig. 24; KUSAMA, 1973, List Ecol. & Dist. Jap. Ceramb.: 53; NAKANE, 1976, Nat. &

Ins., Tokyo, **11**(6): 4. (Shikoku and Kyushu)

Epania shikokensis densepunctata HAYASHI, 1968, Ent. Rev. Japan, **21**: 13; KOJIMA & HAYASHI, 1969, Insects' Life in Japan, **1**: 59, pl. 18, fig. 24a; KUSAMA, 1973, List Ecol. & Dist. Jap. Ceramb.: 53; NAKANE, 1976, Nat. & Ins., Tokyo, **11**(6): 4. (Amami-Oshima Is. and Yaku Is. of the Ryukyus) (**New synonymy**)

Epania shikokensis okinawana HAYASHI, 1976, Bull. Osaka Jonan Women's Junior College, **11**: 7. (Okinawa Is. of the Ryukyus) (**New synonymy**)

Range. Shikoku, Kyushu ? and Ryukyus (Yaku Is., Amami-Oshima Is. and Okinawa Is.).

Specimens examined. Yaku Is.: 1♂ 5♀♀, Miyanoura, 20–22. VII. 1968, TAKAKUWA leg., many others; Amaml-Oshima Is.: 5♂♂ 6♀♀, Mt. Yuwan, 3. VII. 1972, A. SAKAI leg., many others; Okinawa Is.: 1♂, Mt. Yonaha, 28. VI. 1973, T. HATAYAMA leg., 1♂ Mt. Yonaha, 28. IV. 1975, K. SUGINO leg.

Elytra more or less with golden green tint in specimens of Shikoku and Yaku Is., usually with greenish blue but sometimes golden green tint in specimens of Amami-Oshima Is. and Okinawa Is. Pronotal punctation variable, though showing the following tendency: less coarse and rather dense in large specimens, rather coarse and less dense in small ones.

Subsp. *maruokai* HAYASHI, stat. et comb. nov.

Epania maruokai HAYASHI, 1968, Ent. Rev. Japan, **21**: 13; KOJIMA & HAYASHI, 1969, Insects' Life in Japan, **1**: 60, pl. 18, fig. 26; KUSAMA, 1973, List Ecol. & Dist. Jap. Ceramb.: 53; NAKANE, 1976, Nat. & Ins., Tokyo, **11**(6): 4.

Range. Ishigaki Is. and Iriomote Is. (Yaeyama group of the Ryukyus)

Specimen examined. 1♀, near Kanpira Fall, Iriomote Is., 7. IV. 1973, H. IRIE leg.

This subspecies is very rare. Only three specimens have been reported to science up to the present: holotype (♀, Iriomote Is., 18. VII. 1962, H. MARUOKA leg.), 1 ex., Ishigaki Is., 14. IV. 1973, H. IRIE leg. and the above specimen.

Epania dilaticornis HAYASHI (figs. 3a–3p)

Epania dilaticorne HAYASHI, 1950, Ent. Rev. Japan, **5**: 5, fig. 3.

Epania dilaticornis: HAYASHI, 1950, Ent. Rev. Japan, **5**: 72.

Male. Body shiny black; mouth-parts, antennae and legs usually reddish brown to dark reddish brown, but the antennae and hind legs (basal parts of hind femora occasionally ivory-yellow) are sometimes reddish black; elytra dark reddish brown to reddish black, often nearly black. Antenna cylindrical, surpassing apex of hind femur by 9–10 th segments; scape about as long as 3rd; segments 3–8 more or less corpulent near each apex; 5th segment about 4.4 times as long as wide; terminal segment a little shorter than the penultimate, bent and appendiculate near apical portion. Pronotum 1.23–1.4 times as long as wide, with whitish pubescent bands behind apical and before basal margins. Elytra about 1.12–1.3 times as wide as long, usually widest behind humeri, gradually attenuate posteriorly with curving sides; apex separately, broadly rounded; disc finely, somewhat sparsely punctured, irregularly rugulose at the posterior parts, often with a shallow longitudinal concavity at the median part of each elytron. Abdomen with a pair of whitish pubescent marks as follows: maculations at antero-lateral margins of 1st segment (without mark near posterior margin), inclined fasciae at the side of 2nd, small spots at the lateral and post median parts of 3rd and larger spots than in 3rd at the latero-posterior parts of 4th. Hind femora somewhat gradually, but occasionally somewhat abruptly, clavate.

Female. Antennae not extending beyond 1st abdominal segment; each segment wider than in male; scape a little longer than 3rd; terminal segment as illustrated, a little longer or nearly equal to the penultimate.

Body length. 5.5–9.5 mm.

Two subspecies are recognized as shown by the following key:

1. Pronotum longer, 1.40 times as long as wide; elytra almost parallel-sided at basal half, then gradually attenuate posteriorly with curving sides……subsp. *dilaticornis*

— Pronotum shorter, 1.23–1.35 times as long as wide; elytra usually widest behind humeri, then gradually attenuate posteriorly ……subsp. *kumatai*

Subsp. *dilaticornis* HAYASHI

Range. South Kyushu.

Specimen examined. 1♀, Kagoshima City, Kagoshima Pref., Kyushu, 1. Ⅵ. 1941, T. KUSUMOTO leg. (holotype).

Only the holotype is known. It is strange to say that the insect has been forgotten and has never been sited since its original description by HAYASHI (1950).

Subsp. *kumatai* HAYASHI, stat. et comb. nov.

Epania kumatai HAYASHI, 1961, Ent. Rev. Japan, **13**: 45, pl. 10, fig. 10; KOJIMA & HAYASHI, 1969, Insects' Life in Japan, **1**: 59, pl. 18, fig. 25; KUSAMA, 1973, List Ecol. & Dist. Jap. Ceramb.: 52; NAKANE, 1976, Nat. & Ins., Tokyo, **11**(6): 3. (Amami-Oshima Is., Yaku Is. and Tanegashima Is.)

Epania subglabra: HAYASHI, 1961, Ent. Rev. Japan, **13**: 46, pl. 10, fig. 20 (nec GRESSITT, 1938). (Amami-Oshima Is.)

Epania septemtrionalis shibatai HAYASHI, 1976, Bull. Osaka Jonan Women's Junior College, **11**: 8. (Amami-Oshima Is.) (**New synonymy**)

Epania septemtrionalis: KOMIYA, 1980, Gekkan-Mushi, Tokyo, (112): 10, fig. 12 (nec HAYASHI, 1950). (Yaku Is.)

Range. Ryukyus (Okinawa Is., Amami-Oshima Is., Yaku Is. and Tanegashima Is.).

Specimens examined. Okinawa Is.: 1♀, Mt. Yonaha, 28. Ⅳ. 1975, K. SUGINO leg., 1♂, Mt. Yonaha, 13. Ⅵ. 1978, T. OGASAWARA leg.; Amami-Oshima Is.: 4♂♂ 4♀♀, Marubatake, 13. Ⅳ. 1976, N. MORISHIMA leg., also many others collected in spring; holotype (♂) and one paratype (♀) of *shibatai*, 3♂♂1♀, Chuo-rindo, 26. Ⅵ. 1979, T. KAMAKARI leg., also many others collected in summer; Yaku Is.: 1♂, Miyanoura-rindo, 14. Ⅶ. 1972, J. KOMIYA leg., 1♂, Miyanoura, 27. Ⅷ. 1974, T. MIKAGE leg., 1♂, Nagamine, 30. Ⅷ. 1974, T. MIKAGE leg.

This subspecies is mainly collected in April and from late July to August on Amami-Oshima Is. Though the species name *kumatai* was given for spring specimens and *septemtrionalis shibatai* for summer ones, it is difficult to distinguish them by external morphological characteristics. According to Dr. N. MORISHIMA, many specimens of this subspecies emerged in the summer of 1976 from a freshly cut tree in which adults laid eggs in April of 1976. Judging from these facts, it can be surmised that this species emerges twice in a year at that locality. Specimens of Yaku Is. are slightly different from true *kumatai*, because they are more or less discriminated from males of Amami-Oshima Is. by the thiker median and slenderer lateral lobes of male genitalia.

***Epania iriei* sp. nov.** (figs. 4a-4d)

Male. Body shiny reddish black, but the posterior coxae and latero-anterior portions of lst abdominal segment are castaneous and the prothorax is almost black; elytra dark reddish black with a vague, faintly light V-maculation at the median area; antennae and legs generally dark castaneous, but the basal 1/3-1/2 of each femur is ivory-yellow.

Head somewhat sparsely clothed with semierect brown hairs, with white pubescent bands behind anterior margin and before posterior margin, the former of which is not clear on the disc. Scutellum densely clothed with whitish pubescence. Elytra sparsely clothed with semierect brownish hairs. Underside somewhat sparsely clothed with long semierect pale hairs, with pale whitish pubescence near the antero-median parts of lateral margins of lst abdominal segment and latero-anterior corners of 2nd, and with silvery white pubescence on the following parts: mesepimera, posterior coxae except for median areas and 4th and 5th abdominal segments excepting each median part. Antennal segments 1-2 sparsely clothed with semierect hairs, 3-11 densely clothed with minute brown pubescence, and the under surface of 3-5 with a row of sparse semierect brown hairs. Legs generally clothed with long semierect yellow hairs, but basal parts of femora with pale ones.

Head densely, coarsely punctate. Antennae relatively short, barely reaching abdominal apex; relative lengths of segments as follows: 13:4:13:15:18:19.5:20:20:20.5:20:22; segments 4-10 more or less depressed, weakly serrate; segment 5 about 2.86 times as long as wide; terminal segment semicylindrical. Pronotum subcircular, about 1.2 times as long as wide, widest a little behind middle, slightly constricted behind apex and strongly constricted before base; disc densely, coarsely punctate, but the anterior margin is not punctured. Scutellum tongue-shaped, wider

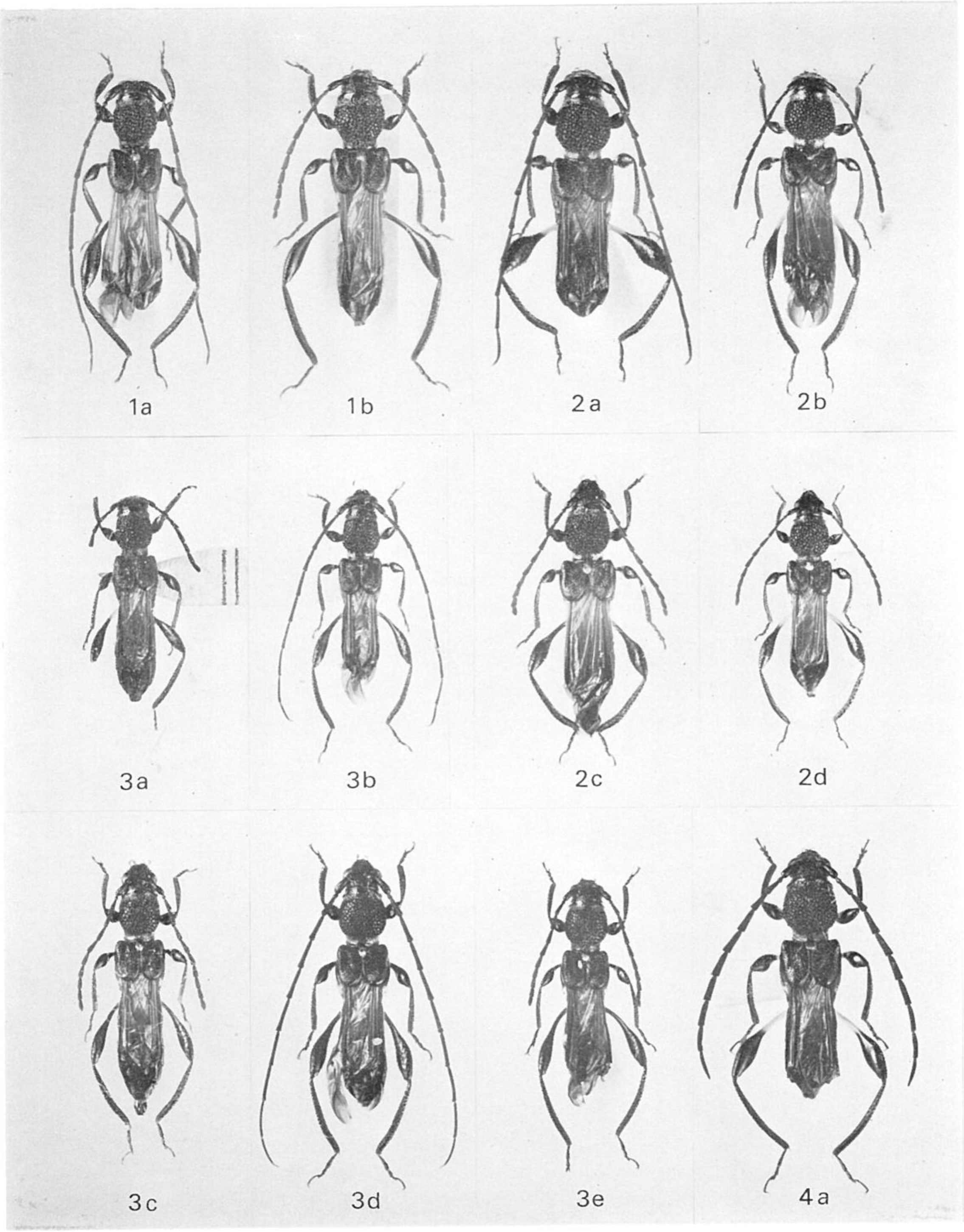

Fig. A. Japanese species of *Epania*

1a. *septemtrionalis*, ♂, 1b. ditto, ♀, 2a. *shikokensis shikokensis*, ♂ (Okinawa Is.), 2b. ditto, ♀ (Amami-Oshima Is.), 2c. ditto, ♀ (Yaku Is.), 2d. *shikokensis maruokai*, ♀, 3a. *dilaticornis dilaticornis*, ♀ (holotype), 3b. *dilaticornis kumatai*, ♂ (Yaku Is.), 3c. ditto, ♀ (Amami-Oshima Is.: spring specimen), 3d. ditto, ♂ (Amami-Oshima Is.: summer specimen), 3e. ditto, ♀ (ditto), 4a. *iriei* sp. nov., ♂ (holotype)

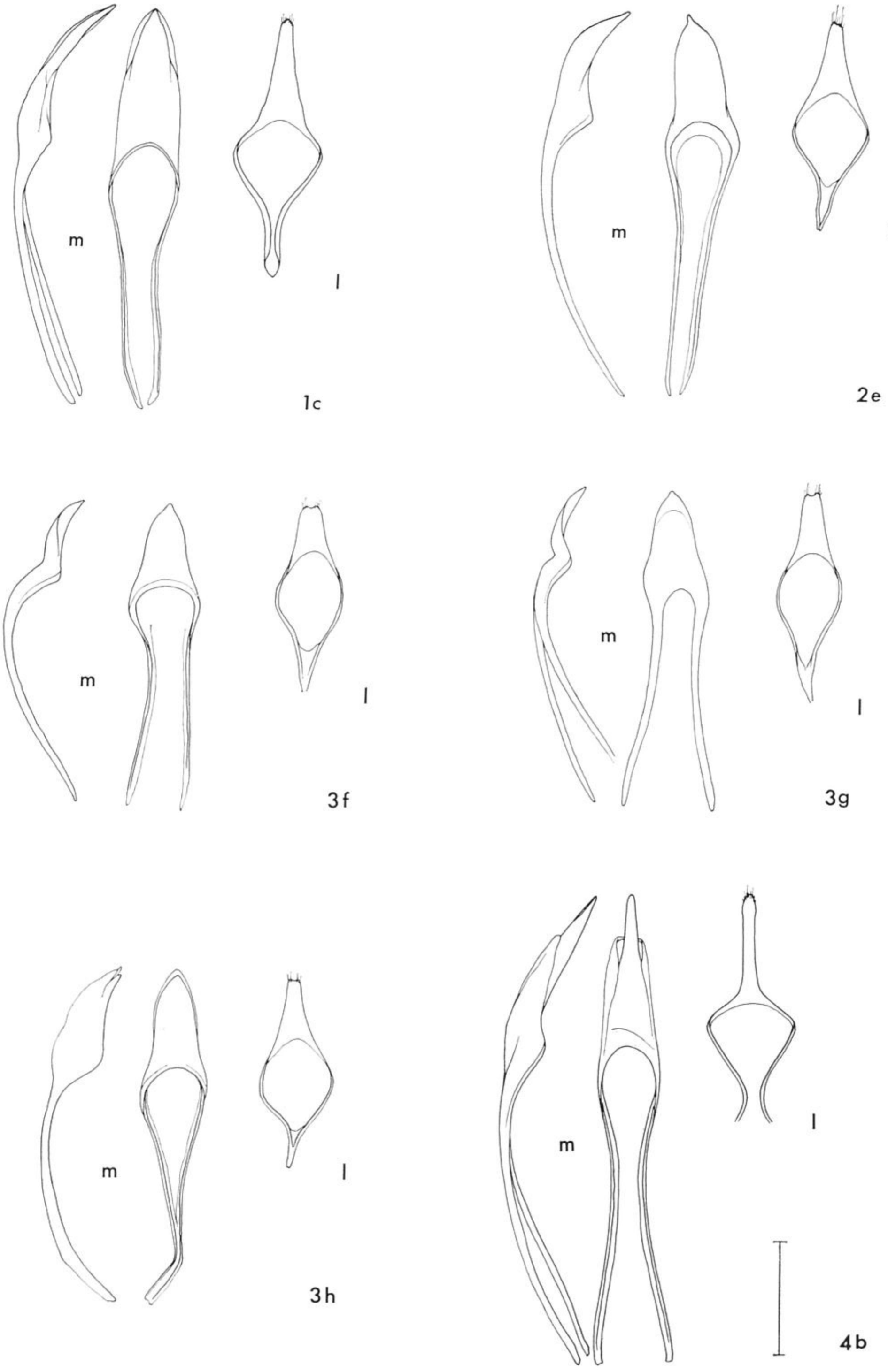

Fig. B. Male genitalia (m: median lobe, l: lateral lobes, scale: 0.5 mm)

1c. *septemtrionalis*, 2e. *shikokensis shikokensis*, 3f. *dilaticornis kumatai* (Amami-Oshima Is.: spring specimen), 3g. ditto (ditto: summer specimen), 3h. ditto (Yaku Is.), 4b. *iriei* sp. nov.

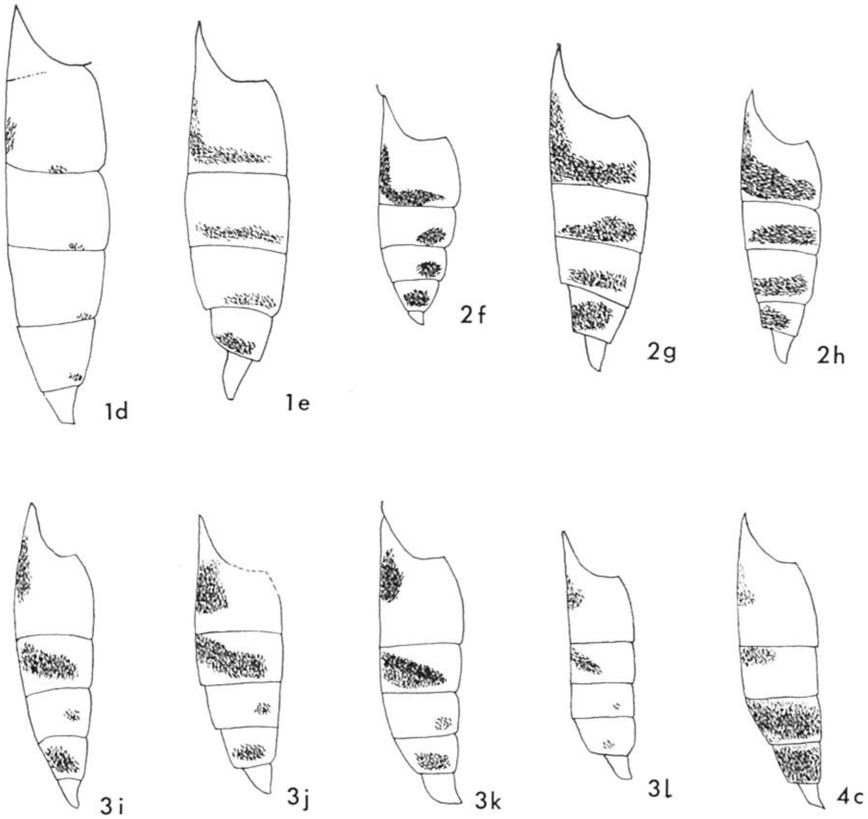

Fig. C. Abdominal whitish pubescent marks, lateral view

1d. *septemtrionalis*, ♂, 1e. ditto, ♀ (developed form), 2f. *shikokensis shikokensis*, ♂, 2g. ditto, ♂ (developed form), 2h. *shikokensis maruokai*, ♀, 3i. *dilaticornis dilaticornis*, ♀, 3j. *dilaticornis kumatai*, ♂ (holotype of *septemtrionalis shibatai*), 3k. ditto, ♂ (Amami-Oshima Is.: spring specimen), 3l. ditto, ♂ (Yaku Is.: underdeveloped form), 4c. *iriei* sp. nov., ♂

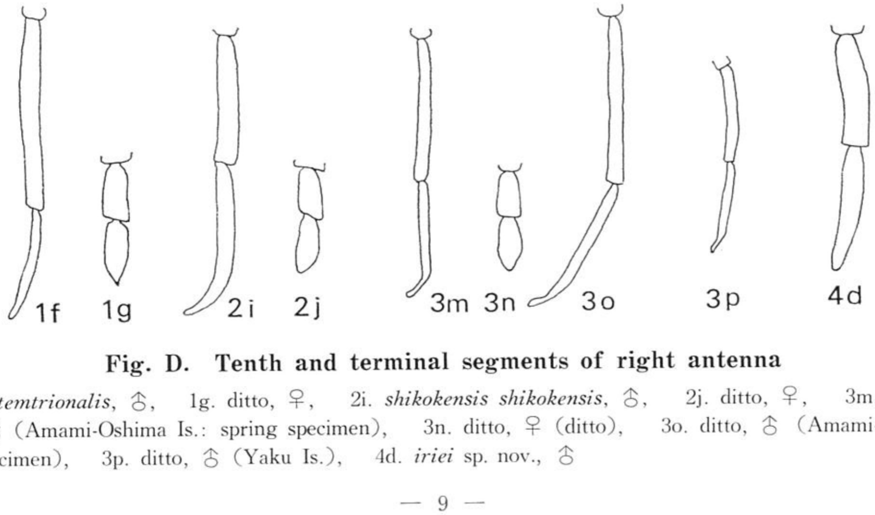

Fig. D. Tenth and terminal segments of right antenna

1f. *septemtrionalis*, ♂, 1g. ditto, ♀, 2i. *shikokensis shikokensis*, ♂, 2j. ditto, ♀, 3m. *dilaticornis kumatai*, ♂ (Amami-Oshima Is.: spring specimen), 3n. ditto, ♀ (ditto), 3o. ditto, ♂ (Amami-Oshima Is.: summer specimen), 3p. ditto, ♂ (Yaku Is.), 4d. *iriei* sp. nov., ♂

than long. Elytra transverse, about 1.28 times as wide as long, weakly projecting at the humeri; sides widest at basal 1/3, relatively abruptly attenuate posteriorly with slight curving; apices relatively narrowly rounded; disc coarsely, and moderately punctate, each with a broad concavity which arcuately runs obliquely from inside humeral angle to apical third of the inner margin. Hind femora somewhat strongly corpulent behind middle.

Body length. 9.0 mm.

Holotype. ♂, near Kanpira Fall, Iriomote Is., 7. Ⅳ. 1973, H. IRIE leg. (deposited in the Natn. Sci. Mus., Tokyo)

Range. Iriomote Is. (Yaeyama group of the Ryukyus)

This new species is evidently different from the other members of *Epania* in having peculiar antennae and abdominal whitish marks.

Acknowledgement

I wish to express my hearty gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum, Tokyo, for his kindness in reading the original manuscript of this paper. Deep thanks are also due to Prof. Drs. M. HAYASHI and K. KUSAMA, Dr. N. MORISHIMA, Messrs. H. IRIE, J. KOMIYA, N. OHBAYASHI, M. TOHYAMA, T. KOBAYASHI, K. SUGINO, T. HATAYAMA, A. SAKAI, T. KAMAKARI, N. OGURA, T. WAKEJIMA, T. OGASAWARA, K. KAWADA and H. AKIYAMA for their kindness in supplying with valuable materials, to Mr. H. FUJITA for preparing genitalic drawings and to Mr. H. MATSUKA for taking photographs inserted in this paper.

摘　要

日本の *Epania* 属について再検討を行ない，これを次のように整理した.

1. *Molorchoepania* PIC を独立属と認め，これを *Epania* から分離した. この扱いは HAYASHI (1974) に続くものである.
2. 日本からは4種を認めた. すなわち,
   1) *E. septemtrionalis* HAYASHI クロサワヒメコバネカミキリ
   2) *E. shikokensis* OHBAYASHI リョウブモモブトヒメコバネカミキリ
   3) *E. dilaticornis* HAYASHI サツマヒメコバネカミキリ
   4) *E. iriei* TAKAKUWA, sp. nov. ノコギリヒメコバネカミキリ（新称）
3. *E. shikokensis* には次の2亜種を認めた.
   1) *E. shikokensis shikokensis* OHBAYASHI
   2) *E. shikokensis maruokai* HAYASHI, stat. et comb. nov.

   なお，*E. shikokensis densepunctata* HAYASHI ならびに *E. shikokensis okinawana* HAYASHI を基亜種と区別しなかった.
4. *E. dilaticornis* には次の2亜種を認めた.
   1) *E. dilaticornis dilaticornis* HAYASHI
   2) *E. dilaticornis kumatai* HAYASHI, stat. et comb. nov.

   なお，*E. septemtrionalis shibatai* HAYASHI を *E. dilaticornis kumatai* の同物異名として扱った.

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コガネムシに関する知見 (2)

石田　正明

Notes on the Lamellicornia (2)

3. Some newly record of the Sericid-Beetles from Japan
4. Description on the female of *Trichomaladera elongata* NOMURA

By Masaaki ISIDA
Miyamae 3-23-5, Suginami-ku, Tokyo Pref. 168

3. 日本産ビロウドコガネ類の新分布記録

コガネムシ科のビロウドコガネ亜科 Sericinae についての知見は，最近野村鎮氏のすばらしい努力のおかげで，飛躍的に開拓され，日本産についてはほぼその全容が明らかにされたかの如く思われる．

この類のコガネは一般に小型で，しかも類似したものが多く，その種名の同定は必ずしも容易ではない．したがって，正確に種名を同定するためには，多数の標本を比較し，文献を十分にあさることはもちろんであるが，それを備えても，なおかつしばしば熟練した手法を必要とする．

従来の採集目録や分布記録の中には，再検討を要すると思われるものが，かなりあると考えられる．これらについては，1つ1つを再確認していくことが必要なのであるが，目録製作後にすでに標本の失なわれているものや，普通種であるためか，単に目撃による認知に基づいて報告されているものなどがあって，現在では追跡することが不可能になっているものも少なくない．今後目録や新分布を記録される方は，必ず証拠標本を保管しておいて下さるようお願いしたい．

本報文において，筆者は手許にある標本および実際に被検することのできた標本に基づいて，従来記録のなかったものについて，新分布と思われるもの若干を記録しておきたい．

1. *Maladera* (s. str.) *impressithorax* NOMURA
ムナクボビロウドコガネ（写真1）

1♀，沖縄本島辺土名，1978. Ⅵ. 9，堀口 徹採集

原産地は奄美大島東仲間である．原記載発表以来，本種の新産地の報告は後述のものがあるだけである．上記の記録は本種の分布をより南に拡げたものである．

上記の沖縄本島辺土名産の個体は，原産地である奄美大島のものとよく一致する．一方，小林は1978年に沖永良部島（奄美諸島）の2♂1♀を，本種の亜種と認めて，ssp. *okinoerabuana* を設定している．しかし，記載文をよむ限りにおいては基亜種の *impressithorax* と明確に区別できる標徴をもっていないように思われる．しかも，上記の沖縄本島産のものが *M. impressithorax* とよく一致する限りは，原産地奄美大島と沖縄本島の中間にはさまれる沖永良部島のものも亜種として区別すべきではないと思われる．ただし，小林が図示している ssp. *okinoerabuana* の♂の genitalia が何らかの原因で変形しているのでなければ，*okinoerabuana* は *impressithorax* とは別種ではないかとの疑問がもたれる．

2. *Maladera* (s. str.) *japonica japonica* (MOTSCHULSKY) ビロウドコガネ

1♂，北海道羅臼岳，1977. Ⅶ. 27，Y. ISHIKAWA leg.

本種の北海道の産地は道南の半島部がしられているが，道東の分布は報告されていないようである．上記の記録は，本種の北限を今のところ示すものである．

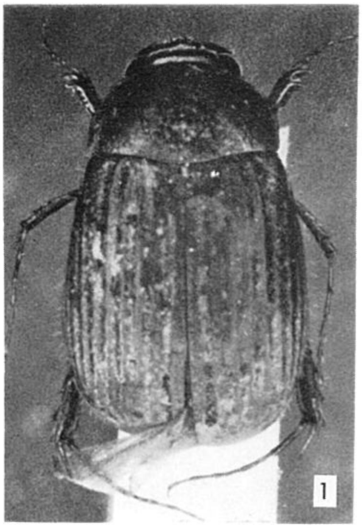
3. *Maladera* (s. str.) *opima* NOMURA
オオマルビロウドコガネ（写真2）

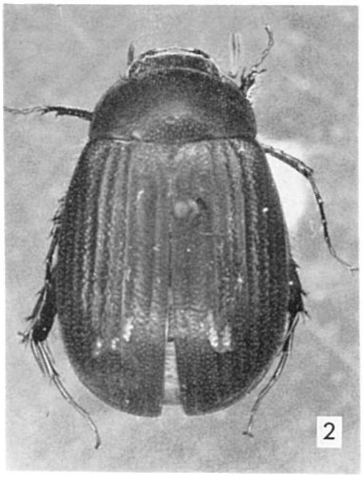
1♂，石垣島おもと岳，1975. Ⅷ. 6，長尾悟採集

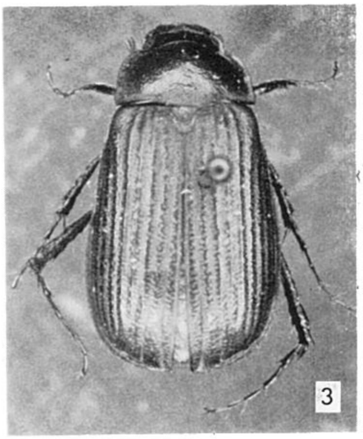
原産地は西表島波照間山である．先島諸島中の西表・宮古の2島から報告されている．今回石垣島を産地として追加する．

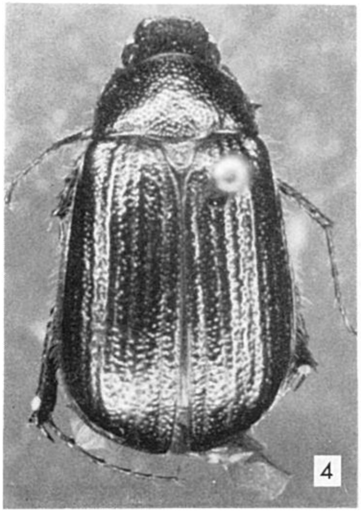
4. *Maladera* (s. str.) *orientalis* (MOTSCHULSKY)
ヒメビロウドコガネ

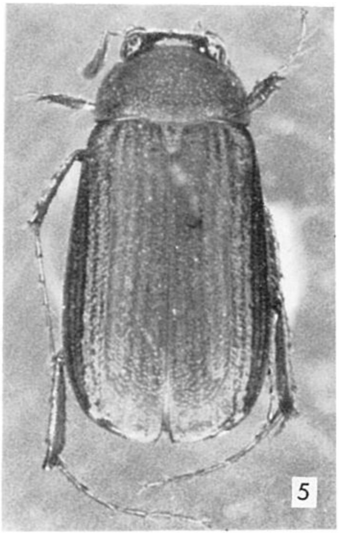
1♂，北海道旭川市春志内，1978. Ⅴ. 18，T. OIDAIRA leg.

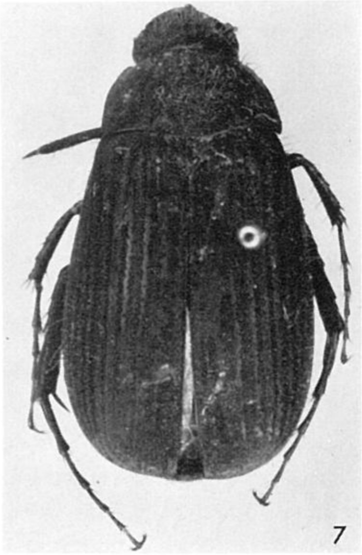












写真：1. ムナクボビロウドコガネ　2. オオマルビロウドコガネ　3. ババチャイロコバネ　4. キラチャイロコガネ
5. ミヤケチャイロコガネ　7. ナガケブカビロウドコガネ

1♂，北海道江別市野幌，1975. Ⅴ. 23，阿部東採集

本種については，小樽からの記録はあるが，北海道からの記録はあまりないようなので，上記の2例をかかげておく．旭川は今のところ本種の北限の産地であろう．

5. *Maladera* (**s. str.**) *oshimana sakishimana* NOMURA サキシマビロウドコガネ

1♂，与那国島租納，1979. Ⅲ. 25，堀口徹・蔵

原産地は西表島租納である．ほかに石垣島おもとからの記録もあるが，上記の与那国島の記録は新分布であって，今のところ分布の西限を示す．

6. *Serica karafutoensis honshuensis* NOMURA ホンシュウビロウドコガネ

1♂，鳥取県大山，1973. Ⅵ. 3，採集者不明

原産地は新潟県蓮華温泉である．北は青森県，裏日本は新潟県，中央高地は長野県，表日本は静岡県までの記録がある．上記の産地は，現在での西限を示すものである．

7. *Nipponoserica similis* (LEWIS) カバイロビロウドコガネ

1♂，高知県梶ケ森，1972. Ⅶ. 27，小坂隆採集

原産地は九州長崎県人吉である．熊本県よりの報告もある．四国では愛媛県の松山よりの報告がある．高知県

よりは初記録であろう.

本種の本州からの記録については再検討を要する.

8. *Sericania babai* NOMURA

バババチャイロコガネ（写真３）

１♀，山形県飯豊山ぬくみ平，1971. Ⅶ. 31，小池寛採集

原産地は新潟県しんぼたけである．新潟県下の２～３か所のほか，栃木県那須からの記録がある．山形県よりの記録は初記録で，本種の分布の北限を今のところ示すものといえよう.

9. *Sericania fulgida* NIIJIMA et KINOSHITA

ツヤチャイロコガネ

１♀，青森県西津軽郡追良瀬，1973. Ⅴ. 15，阿部東採集

１♀，青森県鰺か沢，1974. Ⅵ. 16，阿部東採集

１♀，青森県十二湖，1969. Ⅵ. 23，阿部東採集

１♀，青森県十二湖，1974. Ⅶ. 16，阿部東採集

原産地は栃木県日光中禅祠である．現在報告されている産地の北限は山形県一宮城県である．上記の記録は本種の産地をより北に拡げたものであって，現況での北限を示すものといえる.

10. *Sericania hidana* NIIJIMA et KINOSHITA

ヒダチャイロコガネ

１♂，山梨県北岳（赤石山脈），1976. Ⅶ. 31，長島洋二採集

原産地は飛驒である．現在報告されている産地は，中央日本に位置する新潟・長野・栃木・富山・岐阜・静岡の諸県であり，いずれも山地より採集されている．上記の記録は山梨県よりの初記録ということであるが，中央高地よりの記録としては変わったものとはいえない.

11. *Sericania imadatei* SAWADA

イマダテチャイロコガネ

２♀，岐阜県恵那山，1978. Ⅵ. 11，露木茂採集

原産地は奈良県春日である．三重・滋賀・大阪・奈良の諸府県と四国の愛媛県松山からの記録がある．西日本に傾った分布を示している．上記の記録は岐阜県からの初記録であり，現況での分布東限を示すものである.

12. *Sericania kirai* SAWADA

キラチャイロコガネ（写真４）

１♀，青森県十二湖，1966. Ⅵ. 16，阿部東採集

原産地は九州福岡県ひらの山である．四国の愛媛県面河渓からの記録もある．本州からの記録は鳥取・兵庫・京都・三重・岐阜・静岡・山梨・長野・新潟・群馬の諸府県がある．東北日本からの記録は今まで見あたらないので，上記の記録は現況での北限を示すものである.

13. *Sericania mimica* LEWIS

ナエドコチャイロコガネ

１♀，大阪府茨木市宿久庄，1970. Ⅴ. 1，山口雄次採集

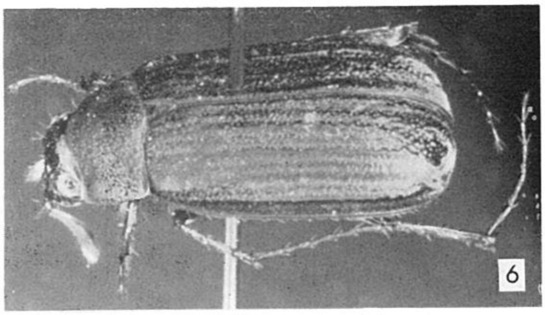


写真６　ミヤケチャイロコガネ

本種の原産地は神奈川県箱根宮の下である．東北日本では岩手県，関東・甲信地方，東海地方，さらに四国の愛媛県や佐渡からの記録がある．上記の大阪よりの記録は現況での本州における本種の分布の西限を示すものである.

14. *Sericania miyakei* NOMURA

ミヤケチャイロコガネ（写真５，６）

１♂，愛媛県小田深山，1971. Ⅴ. 16，菅晃採集

原産地は九州福岡県田代である．北九州以外からの記録はない．上記は四国よりの初記録であり，現況での分布の東限を示す.

以上14種について新分布と思われるものを記録した．この記録は，いわゆる粗分布をとり扱ったもので，実は Sericinae の分布については，分類の精度が進むにつれて，種ごとにより正確な微分布の解明が必要となる.

同好諸氏の標本箱に納まっている標本が精査されて，もっともっと密度の高い分布地図の描かれることがのぞまれる.

4.　ナガケブカビロウドコガネの♀について

Trichomaladera elongata NOMURA ナガケブカビロウドコガネ（新称）は，野村鎮氏によって，1974年に桐朋学報（Tōhō Gakuhō）24号に新属新種として記載された.

模式産地は台湾のララ山で，同地産の２♂♂をそれぞれ holotype, paratype に指定してある．採集期は６月である．他に台湾梨山で７月に採集された２♂♂も paratype に指定している.

したがって本種の記載文は♂についてのみ書かれたものである.

筆者の所蔵標本の中に本種の♀（写真７）をみいだし

たので，これを記録し，和文で記載をしておきたい.

1♀，台湾・埔里（Puli），1963. Ⅷ，採集者不明

標徴：♀，長卵形．暗赤褐色．頭楯・前胸背の周辺・小楯板の周辺と会合線に沿う部分をのぞいた翅鞘の大部分・各肢・口器付属肢・触角はやや淡色．体上面および下面は光沢なし，ただし光によっては真珠様に光る．頭楯・各肢の脛節と跗節・前腿節・触角は光沢あり．

頭楯は台形，浅く疎に点刻され，やや湾曲した長短2種の刺毛を密にそなえ，中央はわずかに高まり，側縁は上反して前方にややせばまり，前縁は上反して中央が彎入し，前縁に沿ってほそい溝があり，前角はまるい．

前頭会線はほそいが明瞭で，後方に直線状に曲る．

前頭は頭楯よりもはるかに微細に点刻され，頭楯のものよりもやや長い湾曲した刺毛をそなえ，特に眼の内側に沿った2〜3本の毛は長い．

触角は10節，片状部は3節で柄部より少し長い（♂では柄部の1.7倍）．

前胸背は前頭および頭頂とほぼ同様の点刻をそなえ，中央後方に細いたての隆起があり，長短2種の刺毛をそなえていて前角部や側縁のものは特に長く，前角は突出して先端はややとがり，後角はほぼ直角でまるく，側縁は細くふちどられ基部で最も広くて前方にむかってせばまりつつ基部3分の1あたりでわずかに波曲し，後縁はふちどられないで中央部は後方へはり出す．

小楯板はややたて長の三角形，中央はほそく隆起し，前胸背とほぼ同様の点刻をそなえ，後方にねる短刺毛をまばらにそなえる．

翅鞘は各9条溝をそなえ，条溝内点刻は前胸背のものよりはやや大きくやや明瞭なものを密にそなえてさらにその両側により大きい点刻を疎にえなえ，間室は平坦で滑らかで一様に後方にねる短刺毛をそなえ，基部・両肩・側縁部には長刺毛をそなえ，側縁隆起上に1列の長刺毛列をもち，翅端にほそい縁膜をもつ．

尾節板はよわく中央が高まり，その中央にほそいたての隆起があり，基部両側はくぼみ，側・後縁はほそいが明瞭にふちどられ，上面は前胸背に比べてより明瞭に点刻され，一様に長短2種の刺毛におおわれていて，その端方のものは長い．

各腹節は尾節板とほぼ同様の点刻をもち，1列の刺毛列をそなえる．

後腿節は長だ円形，前縁に沿って1列の短刺毛列があり，基方は後縁およびその前に各1列のやや長い刺毛列があり，腹部よりはまばらに点刻され，後縁の上稜および下稜の先端部は鋸歯状を呈す．

後脛節はほそ長く，たて長の強い点刻をもち，外側に2段刻を有し，外端棘は第1跗節より短かい．

後跗節はたて長の点刻をもち，下面は刺毛を欠く．

各爪は先端2裂する（前跗節は欠損のため不明）．

体長：13 mm，体幅：7 mm．

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台湾産ゴミムシダマシ科解説〔Ⅱ〕

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Tenebrionidae of Formosa (2) by Kimio MASUMOTO

Tribe Strongyliini

Strongylium alishanum **sp. nov.**

Dark reddish brown; head and femora darker; eyes, apical portions of clypeus and labrum, mouth organs, posterior portions of gula and mesosternum, etc., yellowish brown to reddish brown; elytra strongly shining. Elongate and subcylindrical.

Head subhexagonal, moderately convex, rather closely and minutely punctate throughout; frons gradually sloping toward short obsolete slightly arcuate frontal suture, rugosely punctate; clypeus broadly flattened posteriorly, sublinearly feebly divergent, strongly bent downward in anterior half, nearly straight in front; labrum transverse, roundly narrowed toward straight front margin, feebly convex, sparsely pubescent; genae roundly produced and obliquely well-raised; eyes large, strongly laterally convex; interocular space very narrow, approximately equal to length of 2nd antennal joint, with fine impunctate median impression reaching posterior portion of vertex; antennae filiform, reaching basal 1/4 of elytra, relative length of each joint from base to apex as follows: 7.0, 3.5, 13.5, 10.5, 9.5, 9.0, 8.0, 7.0, 7.0, 7.0, 7.0.

Pronotum transverse (29.0 : 25.0), broadest both at base and before middle; front border nearly straight, raised and ridge-like in median half, slightly emarginate at middle, raise bent backward at front angles and disappearing around frontal 2/5 of pronotum; basal border also nearly straight, margined, thickened and raised in middle; sides broadly rounded, weakly sinuate before base; front angles obtuse; hind angles a little acute; disc feebly convex above, rather closely and strongly punctate, narrowly grooved medianly in basal half, where sparsely punctate, very faintly impressed after middle on both sides. Scutellum tongue-shaped, rather closely and minutely punctate.

Elytra nearly 3 times as long as broad, subparallel-sided in basal half, then a little widened, after Dr. Zoltán KASZAB.

Tribe Amarygmini

Cyriogeton kondoi sp. nov.

Blackish brown; eyes yellowish brown; tarsi and claws reddish brown, mouth organs and undersurface partly so; upper surface bearing strong brassy luster. Oblong oval; very strongly convex above and somewhat hunchbacked.

Head transverse, finely and rather closely punctate, punctures finer and rather sparser posteriorly; frons moderately sloping toward arcuate frontal suture; closely punctate and finely pubescent; clypeus transverse, bent downward anteriorly, straightly truncate in front, closely and pubescently punctate; labrum also transverse with sides rounded, transversely convex in middle, nearly straight in front, rather closely punctate and pubescent; genae obliquely subrectangularly produced, minutely punctate; eyes very large and transverse; interocular space about 3/5 of eye diameter, softly flattened; antennae very long, reaching beyond middle of elytra, 7th to 10th joint slightly dilated to apex, 11th oblong, relative length of each joint (base to apex): 5.0, 2.0, 11.5, 6.5, 9.5, 7.0, 6.5, 6.0, 5.5, 5.0, 6.5.

Pronotum transverse (31.5 : 23.0), broadest at basal 1/3, roundly narrowed anteriorly and shortly sublinearly narrowed toward base; front border very broadly V-shaped, clearly margined; basal broder slightly bisinuate, not margined; sides finely margined; front angles subrectangular and very feebly reflexed at tip; hind angles obtuse; disc strongly convex above, microscopically, rather closely punctate throughout and each puncture with very fine seta, with spot-like shallow impression just beyond middle on both sides. Scutellum triangular with rounded sides, feebly convex, minutely punctate.

Elytra twice as long as broad, broadest at basal 3/7, sublinearly widened near base, then roundly widened and narrowed to apex; dorsum strongly convex above; disc with rows of small punctures (in some cases, punctures finely striated), distance between them equal to 3-5 times their diameter, those in anterior-lateral portions often coalescent and thus seen as spot-like impressions or short longitudinal grooves; intervals weakly convex, rather sparsely and very minutely punctate, finely reticulate; sides finely margined.

Mentum oblong, convex medianly, closely and minutely punctate on both sides; gula triangular, with borders shortly but deeply grooved, finely shagreened; terminal joint of maxillary palpi large and ax-shaped, with straight outer side 1.5 times as long as inner, nearly same length as apical.

Prosternum short, reflexed in front, pubescent, strongly raised between coxal cavities, widely and softly depressed medianly, with prosternal process semicircular and depressed, raised medianly; mesosternum relatively short, rugose and finely pubescent, hollowed in V-shape with pair of prominences in middle, hind margin strongly raised; metasternum smooth, sparsely and minutely punctate, shallowly wrinkled in anterior-lateral portions. Abdomen rather closely and minutely punctate, pubescent, longitudinally wrinkled laterally, with anal sternite truncate and slightly emarginate at apex.

Legs slender; fore femora thickest at basal 3/5 and very feebly angulate; middle and hind ones simply moderately thickened, both often with short straight impressions on underside; tibiae slightly thickened toward apex, with apical half of inner side haired; tarsi without any distinguishing characteristics, relative length of each joint (base to apex): 5.0, 3.5, 2.5, 2.0, 8.0; 7.0, 4.0, 3.5, 2.5, 8.0; 14.0, 4.5, 3.5, 9.0, respectively; claws large and sharp.

Body of female larger and stouter, sides more parallel.

Body length: 12–16 mm.

Holotype: ♂ Taihei-zan, Yilan Hsien, Formosa, 7 Ⅶ 1926, T. KANO leg., paratypes: 1 ex. ditto; 2 exs. Meifeng, Nantou Hsien, 14 Ⅵ 1974, H. YOKOYAMA leg.

This species somewhat resembles *Cyriogeton impressipenne* PIC from China, but is easily distinguishable from the latter in having a larger body, finer and sparser punctures on the pronotum, more obtuse pronotal hind angles, no transverse depression in the anterior portion of the elytra, and elytral striae (or rows of punctures) less deeply carved.

Cyriogeton shigeoi **sp. nov.**

Black; pronotum and elytra dark brownish black; antennae, legs, mouth organs and sometimes humeral spots dark reddish brown; pronotum and elytra metallically shining, sometimes bearing silky sheen. Oblong ovall; strongly convex above and somewhat hunchbacked.

Head transverse, very feebly convex forward, closely punctate, pubescent; frons rather steeply sloping toward straight frontal suture; clypeus transverse, moderately divergent and bent downward toward apex, fairly straightly truncate in front, rather closely punctate and pubescent; labrum oblong with rounded-sides, nearly straight in front, feebly convex, closely punctate and pubescent; genae relatively small, obliquely produced and obtusely raised, sparsely and finely punctate and pubescent; eyes very large and transverse, narrowly laterally arched; narrow interocular space subequal to length of 2nd joint of antennae; antennae slender, reaching middle of elytra, 6th to 10th joint a little dilated toward apex, 11th oblong, relative length of each joint (base to apex): 8.0, 3.0, 15.5, 9.0, 13.0, 12.0, 10.5, 9.0, 8.5, 8.0, 9.0.

Pronotum transverse (57.5 : 37.5), broadest at base in dorsal view; front border straight, finely margined; basal border feebly sinuate on both sides; sides obliquely broadly rounded, finely margined, feebly sinuate near base; front angles obtusely angulate; hind angles subrectangular; disc strongly convex above, nearly smooth or rather closely and minutely punctate, punctures with very fine seta, with small impression before and large oblique impression after middle, each on both sides. Scutellum triangular with rounded sides, slightly convex, sparsely and minutely punctate.

Elytra 1.6 times as long as broad, about 1.3 times breadth of pronotum measured at both broadest points, subparallel-sided in basal 3/5, then a little widened, and gradually narrowed to apex; dorsum strongly convex above; disc with rows of punctures, often striated, punctures deep but fairly small, distance between them about 1-2 times their diameter; intervals nearly flat and wide, rather closely and minutely punctate, punctures very deep but diameter less than 1/4 of those set in rows; sutural portion occasionally raised and ridge-like but usually not; sides narrowly margined.

Mentum tongue-shaped, truncate at base, raised in anterior-median portion, closely punctate and finely pubescent; gula bell-shaped, depressed posteriorly, separated from gena by grooved border, coriaceous and finely pubescent; terminal joint of maxillary palpi large and ax-shaped, with straight outer side about 1.3 times length of inner and subequal to apical.

Prosternum rather short, reflexed in front, rugose and rather densely pubescent, raised between coxal cavities and rather widely and softly depressed medianly, with prosternal process semicircular, depressed, raised medianly, sparsely pubescent; mesosternum also rather short, hollowed in V-shape in middle, strongly raised, rugosely punctate and pubescent posteriorly; metasternum nearly smooth, sparsely pubescent, shallowly wrinkled laterally. Abdomen rather closely, setaceously punctate, shallowly wrinkled laterally, with anal sternite semicircularly emarginate at apex in male.

Fore femora rather strongly thickened with obtuse femural projection at basal 2/3, middle and hind femora only moderately thickened; fore tibiae curved inward, thickened and rather densely haired in apical 4/7 of inner side, middle tibiae curved inward, slightly thickened and also haired in apical 3/5, hind tibiae nearly straight, haired in apical 2/3; tarsi rather densely haired beneath, relative length of each joint: 7.0, 3.5, 3.0, 3.0, 13.5; 11.0, 5.5, 4.0, 3.0, 13.5; 21.5, 7.5, 5.5, 16.0, respectively; claws large and sharp.

Body length: 18-20 mm.

Holotype: ♂ Kenting Park, Pingtung Hsien, Formosa, 15 Ⅳ 1972, H. CHANG leg., paratypes: 1 ex. ditto, 29 Ⅲ 1972, 1 ex. 21 Ⅴ 1973, 1 ex. 23 Ⅳ 1978, K. MASUMOTO leg.; 2 exs. ditto, 15 Ⅳ 1972, 1 ex. 25 Ⅳ 1972, 1 ex. Ⅵ 1972, H. CHANG leg.

This species resembles *Cyriogeton nigroaeneum* GEBIEN from Formosa, but is distinguishable from the latter in having a larger and more oblong body, a narrower interocular space, a nearly smooth (or only very minutely punctured) pronotum, rows of slightly stronger punctures on the elytra, larger and deeper punctures on intervals, a normal sutural portion on the elytra (in the case of *C. nigroaeneum*, it is usually raised and ridge-like), and a quite differently shaped aedeagus.

The new species is named after the late Prof. Shigeo MASUMOTO.

Cyriogeton mayumiae sp. nov.

Blackish brown to black; head, pronotum, scutellum, legs (except tarsi) and major part of undersurface inky blue; each elytron deep greenish blue with large oblong reddish purple and iridescent spot covering anterior portion to basal 2/3; eyes yellowish brown; strongly and metallically shining. Oblong oval and strongly convex above.

Head transverse, weakly convex a little forward, shallowly impressed medianly, sparsely and minutely punctate in middle and anteriorly; frons rather steeply sloping forward; front-clypeal border nearly straight and grooved, each end of groove bent obliquely forward, reaching outer margin; clypeus transverse, flattened posteriorly, rather strongly bent and narrowed to apex, straightly truncate in front, rather closely punctate, punctures relatively larger than those on frons; labrum also transverse with sides rounded, straight in front, feebly convex, rather closely punctate and pubescent; genae obliquely and obtusely produced, rather closely and minutely punctate; eyes large and transverse; interocular space nearly same width as eye diameter, sometimes with pair of spot-like impressions; short eyelash-like hairs just behind eyes; occiput closely punctate; antennae relatively slender, reaching basal 1/5 of elytra, 7th to 10th joint dilated to apex, 11th ovoid, relative length of each joint (base to apex): 4, 5, 2. 0, 8. 0, 3. 5, 5. 0, 4. 5, 4. 5, 4. 0, 3. 5, 3. 5, 4. 5.

Pronotum transverse (35. 0 : 19. 0), broadest at base, nearly straight in basal 2/5, then rather strongly narrowed to front; front border slightly emarginate and finely margined; basal border softly sinuate on both sides; sides also finely margined, very slightly sinuate near front angles and more conspicuously so after middle in dorsal view; front and hind angles subrectangular, former acute and latter obtuse; disc strongly convex above and a little forward, microscopically and rather sparsely punctate throughout. Scutellum triangular, sparsely and minutely punctate.

Elytra about 1. 4 times as long as broad, 1. 3 times broader than pronotum near base, subparallel-sided in basal 2/7, then gradually widened, broadest at basal 4/7, roundly narrowed to apex; dorsum rather strongly convex above; disc not punctate-striate but with rows of very small punctures, distance between them about 2–3 times their diameter; intervals flat, sparsely and microscopically punctate, feebly reticulate; sides finely margined.

Mentum tongue-shaped, raised in anterior-median portion, closely punctate and sparsely pubescent; gula triangular, finely reticulate, bordered by short grooves; terminal joint of maxillary palpi securiform, with slightly curved outer side about 1. 8 times as long as inner and 1. 2 times as long as apical.

Prosternum short, finely reflexed in front, rather rugose anteriorly, raised between coxal cavities, widely and softly depressed medianly, sparsely and finely punctate, with prosternal process semicircular, strongly depressed, prominent in middle, very finely margined; mesosternum also short, closely and pubescently punctate in middle, with hind margin strongly raised in V-shape; metasternum sparsely and finely punctate, wrinkled anteriorly and laterally. Abdomen rather sparsely and finely punctate and pubescent, obliquely wrinkled in 3 anterior sternites, with anal sternite shortly truncate at apex.

Fore femora with blunt projection at basal 5/8, middle and hind femora only simply moderately thickened; fore tibiae weakly curved inward, thickened and haired in apical 3/5 of inner side, middle tibiae similar to fore, hind tibiae slightly thickened toward apex and haired on inner side; tarsi without any distinguishing characteristics, relative length of each joint: 4.0, 2.5, 2.0, 2.0, 8.5; 5.0, 3.0, 2.5, 2.0, 9.0; 7.5, 3.0, 2.5, 9.0, respectively; claws relatively large and sharp.

Body length: 11.5–12.5 mm.

Holotype: ♂ Alishan (2400m), Chiayi Hsien, Formosa, 10 VI 1977, J. KLAPPERICH leg., (HNHM), paratypes: 1 ex. Nôkô-zan, Nantou Hsien, 10 VIII 1966, C. YU leg.; 1ex. Chaoshetashan, Nantou Hsien, VII 1928, 1ex. Nôkô-zan, 30 VII 1928, 1 ex. Hinan-shuzan (Pilam-chushan), 1 VI 1929, 1 ex. Patungkuang, Chiayi Hsien, 15 VIII 1927, T. KANO leg.

This new species somowhat resembles *Cyriogeton semipurpureum* PIC from Bengal but is distinguishable from the latter in having quite different coloration on the upper surface, and rows of very small and sparse punctures on the elytra. In the case of *C. semipurpureum*, the body is thicker, the upper surface is almost entirely reddish cyanic, and the elytra bear distinct punctate-striae.

Cyriogeton nishikawai sp. nov.

Black; 6 apical joints of antennae, claws, mouth organs and gula brownish; upper surface metallic and strongly shining. Ovoid; strongly convex above and hunchbacked.

Head rather transverse, feebly convex forward, rather closely and minutely punctate; frons simply sloping forward; frontal suture straight but short, with both ends bent forward, obliquely and shortly reaching outer margin; clypeus relatively larger, bent downward anteriorly, subparallel-sided, nearly straightly truncate in front, rather closely and finely punctate and pubescent; labrum transverse with rounded sides, widely rounded in front, slightly convex, closely and pubescently punctate; genae obliquely produced and obtusely raided, sparsely punctate; eyes large, narrowly arched laterally; interocular space a little wider than eye diameter; occiput closely punctate; tempora gently narrowed; antennae slender, slightly thickened towards apex, reaching basal 1/5 of elytra, relative length of each joint (base to apex): 4.0, 2.0, 7.0, 3.5, 4.5, 4.0, 4.0, 3.5, 3.0, 3.0, 4.0.

Pronotum strongly transverse (29.0 : 16.5), broadest at basal 2/5, nearly straightly narrowed to front, moderately and roundly narrowed to base; front border nearly straight, finely but deeply margined; basal border rather strongly bisinuate; sides finely and deeply margined; front angles subrectangular with rounded tip; hind angles obtuse; disc strongly convex above, microscopically and evenly punctate. Scutellum tongue-shaped, declined toward base, rather closely and minutely punctate.

Elytra about 1.3 times as long as broad, subparallel-sided in basal 2/5, then gradually widened, broadest at basal 4/7, and roundly narrowed to apex; dorsum strongly convex, thickest at basal 2/7, sloping toward base in basal portion, a little swollen in humeral portions, more largely swollen in inner portions near base, obliquely widely depressed just after swells; disc with rows of punctures set 1–3 times their diameter apart, 5th row conspicuously depressed both near base and at basal 2/7; intervals nearly flat and impunctate; basal border feebly arched on both sides, crenated; sides narrowly margined.

Mentum subcordate, truncate at base, raised in anterior-median portion, finely punctate and pubescent on both sides; gula triangular, smooth anteriorly, rugose and depressed posteriorly, finely but deeply bordered; terminal joint of maxillary palpi large, straight outer side about 1.7 times as long as inner, 1.2 times as long as apical.

Prosternum short, rugose and pubescent, finely reflexed in front, raised between coxal cavities with pair of prominences and depressed medianly, prosternal process triangular, rugose; mesosternum rugose and sparsely pubescent, with hind margin strongly raised in V-shape; metasternum nearly smooth, very feebly wrinkled, sparsely, pubescently and finely punctate, rugose near front border, obsoletely punctate and coriaceous laterally. Abdomen rather closely and finely punctate and pubescent, longitudinally wrinkled in lateral portions other than 2 apical sternites, with anal sternite feebly truncate at apex, outer margin finely margined.

Legs long, rather closely and strongly punctate; fore femora with thin sharply pointed projection at basal 5/6, middle and hind femora simply moderately thickened; fore tibiae rather strongly curved inward, thickened and bearing brownish hairs in apical half of inner side, middle tibiae also curved inward but just slightly thickened toward apex, haired in apical half of inner side, hind tibiae nearly straight, also slightly thickened and haired in apical half; tarsi without any distinguishing characteristics, relative length of each joint: 3.0, 1.8, 1.5, 1.5, 7.5; 4.0, 2.5, 2.5, 2.0, 8.0; 9.5, 3.0, 2.5, 7.5, respectively; claws large and sharp.

Body length: ca. 9 mm.

Holotype: ♂ Nanshanchi, Nantou Hsien, Formosa, 1 V 1979, K. EMOTO leg.; paratype: 1 ex. ditto, 10 V 1977, Y. KOMIYA leg.

This new species somewhat resembles *Plesiophthalmus mizusawai* YAMAZAKI from Amami-Oshima Is., but is easily distinguishable from the latter in having a larger and stockier body, rows of finer punctures on the elytra, and a sharply pointed profemoral projection.

Cyriogeton fujitai **sp. nov.**

Black; mouth organs, basal portions of legs and claws brownish; pronotum and elytra bearing deep greenish metallic luster; strongly shining. Oblong oval; strongly convex above and somewhat hunchbacked.

Head transverse, feebly convex forward, finely and rather closely punctate throughout, very closely punctate on occiput, with short median impression on vertex; frons gently sloping toward front-clypeal border; frontal suture short and finely grooved, bowed to rear; clypeus transverse, subparallel-sided, bent downward anteriorly, truncate in front, closely and finely punctate, pubescent; labrum relatively large and transverse with rounded sides, straight in front, feebly convex, finely punctate and rather densely pubescent; genae obtusely produced, weakly raised, sparsely and minutely punctate; eyes large and transverse, feebly laterally arched, deeply grooved along hind portion; interocular space about 1. 7 times eye diameter; tempora gently narrowed; antennae slender, reaching beyond base of elytra, 6th to 10th joint weakly dilated to apex, 11th oblong oval, relative length of each joint (base to apex): 5. 0, 2. 0, 9. 0, 5. 0, 6. 0, 5. 5, 5. 0, 4. 5, 4. 5, 4. 0, 6. 0.

Pronotum transverse, 1. 6 times as broad as long, broadest at middle, roundly narrowed to front and base, very feebly sinuate just before base; front border nearly straight and clearly margined: basal border weakly bisinuate; sides narrowly magined; front angles subrectangular; hind angles a little obtuse; disc strongly convex above, rather closely and minutely punctate, size of punctures subequal to those on head. Scutellum regular triangle, feebly convex, sparsely and minutely punctate.

Elytra about 1. 5 times as long as broad, gradually widened from base to posterior portion, broadest at 3/5 from base, then roundly narrowed to apex; dorsum strongly convex, slightly swollen in humeral portions, very softly depressed after scutellum; disc finely punctate-striate; intervals flat and impunctate; sides narrowly margined.

Mentum transverse with oblique sides, rugose, raised in anterior-median portion; gula triangular, finely reticulate, bordered by deep groove anteriorly; terminal joint of maxillary palpi relatively large, securiform, with nearly straight outer side about 1. 7 times as long as inner, 1. 3 times as long as apical.

Prosternum short, rather strongly reflexed in front, strongly raised between coxal cavities, softly depressed and bisulcate medianly, with prosternal process semicircular and depressed, raised medially, rugose on both sides; mesosternum also short, deeply hollowed in V-shape in middle, strongly elevated posteriorly, with fine ridge along front border of posterior elevation; metasternum nearly smooth, sparsely and very finely punctate and pubescent, rugose in front, obsoletely punctate and coriaceous on both sides. Abdomen finely and setaceously punctate, very shallowly wrinkled throughout, with anal sternite nearly smooth, rather closely punctate and pubescent in apical half.

Legs rather closely punctate; fore femora with thin but sharply pointed projection at 3/5 from base, middle and hind femora simply thickened; tibiae feebly thickened toward apex, fore and middle tibiae slightly curved inward, hind tibiae nearly straight; tarsi without any special characteristics, relative length of each joint: 4.5, 3.5, 2.5, 2.0, 6.0; 6.5, 3.0, 2.5, 2.0, 8.0; 10.5, 3.5, 2.5, 8.5, respectively; claws sharp.

Body length: ca. 14 mm.

Holotype: ♀ Tah-Man, Nantou Hsien, Formosa, 25 V 1977, H. FUJITA leg.

This new species is distinguishable from the allied species *Cyriogeton kondoi* MASUMOTO from Formosa in having a stocky body, a wider interocular space, a nearly straight pronotal front border, and finer, unfoveolated punctate-striae.

Cyriogeton nanshanchiense **sp. nov.**

Black; claws, undersurface partly brownish; upper surface bearing greenish black tinge; rather dully shining. Oblong oval; strongly convex above and hunchbacked.

Head transverse, very feebly convex forward, rather closely punctate and finely pubescent; frons simply sloping toward widely arcuate front-clypeal border; clypeus transverse, bent downward and straightly truncate in front, subparallel-sided, closely punctate and pubescent; labrum transverse, roundly convergent to apex, nearly straight in front, feebly convex, closely and finely punctate and pubescent; genae obtusely produced and raised, rather closely and finely punctate and pubescent; eyes large and transverse, narrowly laterally arched; interocular space widely and softly depressed, width subequal to eye diameter; antennae slender, 8th to 10th joint moderately dilated to apex, 11th oblong oval, relative length of each joint (base to apex): 5.0, 2.0, 11.0, 5.5, 7.5, 7.0, 6.5, 5.0, 5.5, 4.5, 5.5.

Pronotum 1.5 times as broad as long, broadest at middle, moderately roundly narrowed to front, weakly so to base, slightly sinuate before base; front border feebly emarginate, narrowly margined; basal border slightly bisinuate; sides narrowly margined; front angles subrectangular; hind angles obtuse; disc strongly convex above and somewhat forward, rather closely, strongly, setaceously punctate throughout, punctures as large as those on head, with shallow median groove anteriorly. Scutellum subcordate, feebly convex, sparsely and minutely punctate.

Elytra about 1.6 times as long as broad, subparallel-sided from base to middle, then slightly laterally arched, broadest at basal 2/3, roundly narrowed toward apex; dorsum strongly convex with large gibbous elevation after scutellum, anterior portion of elevation obliquely and rather steeply sloping forward, lesser elevation before it on both sides; disc very finely striate, punctures in striae set approximately 1–3 times their diameter apart, those in inner portion small and closely set, larger and sparsely set in outer portion; intervals feebly convex, finely, setaceously, punctate; basal border obtusely crenated; sides narrowly margined.

Mentum trapezoid, raised in anterior-median portion, closely, finely and pubescently punctate on both sides; gula triangular, finely coriaceous, shortly but deeply bordered; terminal joint of maxillary palpi large, with sublinear outer side about 1.4 times as long as inner, 0.8 times as long as apical.

Prosternum short, rather coarsely reflexed in front, rugose and pubescent, strongly raised between coxal cavities, rather widely depressed, with prosternal process semicircular and depressed, raised in anterior-median portion, coarsely punctate, very finely rimmed; mesosternum strongly rugose and finely pubescent, hollowed in middle, strongly raised in V-shape posteriorly; metasternum nearly smooth, feebly wrinkled, sparsely and finely punctate and pubescent, rugose near front border, obsoletely punctate laterally. Abdomen rather closely and finely punctate and rather densely pubescent throughout, with anal sternite shortly truncate at apex.

Legs long, closely, setaceously punctate; fore femora with small but sharply pointed projection at 2/3 from base, middle and hind femora simply moderately thickened; fore tibiae slightly curved inward, thickened and shortly but densely haired beneath in apical half, middle and hind tibiae slightly thickened toward apex, also haired in apical half, former slightly curved inward and latter nearly straight; tarsi normal, relative length of each joint: 3.5, 2.2, 2.0, 1.8, 9.0; 7.5, 4.0, 2.5, 2.2, 9.5; 13.0, 4.0, 3.0, 10.0, respectively; claws relatively large and sharp.

Body length: 13.5 mm.

Holotype: ♂ Nanshanchi, Nantou Hsien, Formosa, 27 VI 1978, H. AKIYAMA leg.

This remarkable new species somewhat resembles *Cyriogeton impressipenne* PIC from China but is distinguishable from the latter in having more obtuse hind angles of the pronotum, and gibbous elevations and finely striated punctures on the elytra.

Plesiophthalmus kanoi sp. nov.

Black; eyes, antennae, legs, mouth organs, part of underside blackish brown; rather strongly shining. Oblong oval; relatively strongly convex above.

Head transverse, feebly convex forward, closely and often confluenly punctate and finely pubescent; frons gently sloping toward sublinearly and shortly grooved front-clypeal border; clypeus flattened posteriorly, moderately and transversely convex in middle, sublinear-sided, weakly bent downward and truncate in front, closely and pubescently punctate; labrum transverse with rounded sides, straight in front, very feebly convex, closely punctate and pubescent, punctures a little smaller than those on clypeus; genae moderately and roundly produced, rather closely and finely punctate, shortly pubescent; eyes large and transverse, rather narrowly laterally arched; interocular space very narrow and equal to twice length of 2nd antennal joint; vertex very softly impressed; antennae slender, reaching basal 1/3 of elytra, 6th to 10th joint thickened to apex, 11th oblong, relative length of each joint (base to apex): 5.0, 2.0, 9.5, 5.5, 7.5, 6.5, 5.5, 5.0, 5.0, 4.5, 6.0.

Pronotum 1.2-1.3 times as broad as long, broadest at base; front border very slightly arched in front, finely margined; basal border weakly arched to rear, but shortly truncate opposite scutellum; sides widely rounded, finely margined; front and hind angles angular, former a little acute, latter relatively obtuse; disc rather strongly convex above, closely and setaceously punctate, punctures closer and stronger in lateral portions, with faint small impression just beyond middle on both sides. Scutellum triangular with rounded sides, slightly elevated, sparsely, finely and setaceously punctate.

Elytra a little less than 1.5 times as long as broad, subparallel-sided at basal 3/5, then feebly laterally arched and roundly narrowed to apex, weakly produced to rear in apical portion; dorsum rather strongly convex above; disc punctate-striate, punctures strong and set about 2—3 diameters apart; intervals weakly convex, rather closely and finely setaceously punctate, punctures smaller than those on pronotum, rather distinctly reticulate, a little rugose in anterior-lateral portions; basal border crenated on both sides; sides narrowly margined.

Mentum semicircular, feebly truncate at base, anterior-median portion convex, closely punctate and shortly pubescent; gula triangular, sparsely and finely punctate and pubescent anteriorly, finely shagreened posteriorly, bordered by groove on both sides; terminal joint of maxillary palpi relatively large, strongly spread, sublinear outer side about 1.5 times as long as inner and subequal to apical.

Prosternum short, reflexed in front, rugose and pubescent, raised between coxal cavitities, softly depressed medianly, with prosternal process semicircular and depressed, rugose and sparsely pubescent, finely rimmed; mesosternum relatively short, rugose and pubescent, hollowed in V-shape in middle, strongly raised posteriorly, with distinct crescent-like elevation at anterior-inner portion surrounding coxal cavity; metasternum sparsely, finely and setaceously punctate. Abdomen closely and pubescently punctate, wrinkled laterally, with anal sternite truncate and slightly emarginate at apex.

Fore femora with thin femural projection at basal 5/8, middle and hind femora slender; fore tibiae weakly curved inward, gradually thickened and densely haired in apical 4/7 of inner side, middle tibiae more weakly curved inward, feebly thickened to apex, also haired in apical 2/3, hind tibiae nearly straight but very slightly bent outward at basal 2/5, feebly thickened to apex, haired in apical 4/7; tarsi without any peculiarities, relative length of each joint: 4.5, 2.5, 2.5, 2.0, 8.5; 6.5, 3.0, 2.8, 2.5, 8.0; 13.0, 4.0, 3.0, 9.5, respectively; claws relatively large and sharp.

Body length: 14 mm.

Holotype: ♂ Hori (Puli), Nantou Hsien, Formosa, 28 IV 1927, T. KANO leg.

This species is allied to *Plesiophthalmus punctatus* M.T. CHÛJÔ from the Ryukyu Is., but is distinguishable in having a smaller and less strongly convex body, transverse eyes in dorsal view, a pronotum broadest at the base, more convex intervals on the elytra with more conspicuous microsculpture, and a clearly smaller aedeagus.

Plesiophthalmus taiwanus sp. nov.

Blackish brown; eyes, outer portions of genae, antennae, legs, mouth organs, etc., a little lighter in color; pronotum and elytra bearing strong coppery luster; other portions moderately shining. Oblong oval; strongly convex above and somewhat gourd-shape. Brachypterous.

Head transverse, rather strongly and also closely punctate throughout, finely pubescent anteriorly; frons simply sloping forward; front-clypeal border nearly straight and grooved; clypeus transverse, flattened posteriorly, convex in middle, weakly and shortly divergent, bent downward and straightly truncate in front, more closely punctate than frons and pubescent; labrum transverse, roundly narrowed, nearly straight in front, feebly convex, closely and pubescently punctate; genae rather strongly raised, with outer margin sublinearly oblique in anterior half and rounded posteriorly, rather closely and minutely punctate; eyes large and transverse, narrowly but strongly laterally arched in dorsal view; interocular space a little less than eye diameter; vertex very closely punctate posteriorly, with transverse, low and fine ridge on border of occiput; antennae slender, reaching middle of pronotum, 6th to 10th joint weakly dilated to apex, 11th subfusiform, relative length of each joint (base to apex): 5.5, 2.0, 10.5, 5.0, 7.5, 6.5, 6.5, 5.5, 5.5, 5.0, 6.5.

Pronotum about 1.4 times as broad as long, broadest at middle; front border very broadly V-shaped and margined; basal border widely rounded to rear and not margined; sides roundly laterally arched, margined and slightly reflexed; front angles rectangular; hind angles obtuse with tip slightly produced; disc strongly convex above, rather closely and very finely punctate throughout. Scutellum triangular, with sides a little rounded, depressed and nearly flat, sparsely and minutely punctate.

Elytra about 1.5 times as long as broad, a little less than 1.3 times broader than pronotum at both broadest points, slightly broader than pronotum at base, roundly laterally arched, broadest after middle, slightly produced to rear and dehiscent at apexes; disc not punctate-striate but with rows of small, longitudinal punctures, distance between them about 1-3 times their diameter; intervals flat, very minutely punctate throughout; basal border crenated; humeral corners obtusely angular; sides finely margined.

Mentum tongue-shaped, shortly truncate at base, raised in anterior-median portion, obliquely grooved on both sides; gula triangular and nearly smooth, bordered by fine groove from setaceously punctured gena; terminal joint of maxillary palpi large and strongly divergent, with sublinear outer side about 1.2 times as long as inner, 0.8 times as long as apical, outer corner a little rounded, inner corner acute.

Prosternum short, strongly reflexed in front, strongly raised between coxal cavities but rather deeply depressed medianly, with prosternal process triangular and depressed, projected at tip; mesosternum short, strongly raised in somewhat Y-shaped elevation posteriorly, finely punctate and pubescent, with somewhat crescent-shaped elevation at anterior-inner portion surrounding coxal cavity; metasternum also short, very sparsely and finely, setaceously punctate, a little more closely laterally. Abdomen rather closely and finely, setaceously punctate throughout, shallowly wrinkled, with anal sternite closely and setaceously punctate, prominent near apex in male.

Fore femora rather strongly thickened, with thin but conspicuous femural projection at basal 5/7, middle and hind femora simply moderately thickened; fore tibiae slightly curved inward, thickened and rather densely haired in apical 3/5 of inner side, middle tibiae feebly curved inward, hind tibiae nearly straight, both weakly thickened to apex, also haired in apical half; tarsi slender, relative length of each joint: 5.5, 2.5, 2.0, 2.0, 8.0; 8.0, 3.0, 2.5, 2.5, 9.0; 13.0, 4.5, 4.0, 10.0, respectively; claws sharp.

Body length: 12-13 mm.

Holotype: ♂Suisharyô, Chiayi Hsien, Formosa, 10 VII 1961, S. UÉNO leg., paratypes; 2 exs. Fenchihu (1400m), Chiayi Hsien, 13 VI 1977, J. KLAPPERICH leg., (HNHM).

This species is closely related to *Plesiophthalmus borchmanni* KASZAB from Kuatun, China, but is distinguishable from the latter in having a smaller body, a pronotum with rounded sides and less acute hind angles, and rows of finer punctures on the elytra. The species may belong to a new genus which is allied not only to *Plesiophthalmus* but also to *Oogeton.*

Amarygmus sakaii **sp. nov.**

Reddish brown to blackish brown; upper surface tinged light coppery and bearing metallic luster. Oblong oval and strongly convex above.

Head transverse, strongly declined forward from vertex, very feebly convex forward, rather closely and strongly punctate, punctures small but deep, closer on vertex and occiput; remarkable groove on front-clypeal border with both ends bent forward and reaching outer margin; clypeus transverse, slightly arched in front, sublinear-sided, feebly convex, closely punctate; labrum also transverse with rounded sides, truncate and slightly emarginate in front, feebly convex, closely punctate and sparsely pubescent; genae weakly produced and raised, closely and minutely punctate; eyes large but shortly arched laterally; interocular space a little less than length of eye diameter, with spot-like impression on both sides; antennae medium-sized, reaching basal 1/5 of elytra, 5th to 10th joint slightly dilated to apex, 11th ovoid, relative length of each joint (base to apex): 4.0, 1.5, 4.5, 3.5, 3.5, 3.5, 3.5, 3.5, 3.5, 3.5, 4.0.

Pronotum transverse (37.0 : 20.0), broadest at base; front border feebly bisinuate and finely margined; basal border softly bisinuate, roundly produced to rear at median 1/4; sides obliquely arched, slightly sinuate near base, margined; front angles subrectangular with rounded tip; hind angles obtuse but with angulate tip; disc strongly convex above, rather closely and deeply punctate, punctures a little larger than those on head, with short impression at base on both sides. Scutellum triangular, sparsely punctate, punctures smaller than those on pronotum, subequal to those on elytra or head.

Elytra about 1.6 times as long as broad, subparallel in basal 3/7, then a little laterally arched, broadest at basal 5/7, gradually narrowed to apex; dorsum strongly convex; disc with rows of small, elongate punctures, often striated in inner portion; intervals wide and flat, sutural intervals shortly raised near scutellum, punctate throughout, punctures small but deep, sparser than those on pronotum; sides narrowly margined.

Mentum trapezoid, closely and rugosely punctate, anterior-median portion raised; gula nearly tongue-shaped, wrinkled, bordered by grooves laterally; terminal joint of maxillary palpi relatively large, with slightly curved outer side about 1.4 times as long as inner and 0.8 times as long as apical.

Prosternum short and rugose, strongly reflexed in front, strongly raised between coxal cavities, depressed like V-shaped valley medially, with semicircular prosternal process wrinkled; mesosternum also short, finely punctate and rugose, deeply hollowed in V-shape in middle, nearly vertically raised in somewhat Y-shaped elevation posteriorly, with each apex of elevation a little prominent; metasternum rather closely punctate in middle, sparsely so and shallowly wrinkled laterally. Abdomen closely punctate throughout, punctures smaller posteriorly, longitudinally wrinkled in lateral portions of 3 anterior sternites, with anal sternite finely pubescent in middle.

Legs without any distinguishing characteristics, relative length of each tarsal joint: 3.0, 2.0, 2.0, 1.8, 6.5; 4.5, 3.0, 2.5, 2.0, 6.5; 10.5, 4.0, 3.0, 6.0, respectively; claws small but sharp.

Body length: 9.0–10.5 mm.

Holotype: ♂ Kenting Park, Pingtung Hsien, Formosa, 3 V 1971, K. SAKAI leg., paratypes: 1 ex. ditto; 1 ex. Kenting Park, V 1973, H. CHANG leg.; 1 ex. Juisuei, Hualien Hsien, 3 VI 1973, H. YOKOYAMA, leg.; 1 ex. Paling, Taoyuan Hsien, 24, V 1977, H. FUJITA leg.

This species is quite unique in having small but deep punctures on the upper surface. This is the first species of its type to be found anywhere in the Oriental region. Another new allied species found in the Ryukyu Islands will be described in the near future.

Amarygmus taiwanus sp. nov.

Blackish brown; upper surface dark green; antennae, tibiae, tarsi, mouth organs, gula, etc., lighter in color; strongly and somewhat metallically shining. Ovoid and strongly convex above.

Head relatively small, very slightly convex forward, rather closely and minutely punctate anteriorly, more closely so on vertex and occiput; frons rather steeply sloping; front-clypeal border straightly and deeply grooved; clypeus large with rounded sides, nearly straightly truncate in front, slightly convex transversely, rather closely punctate, sparsely pubescent anteriorly; labrum semicircular, shortly straight in front, slightly convex forward, closely punctate and pubescent anteriorly; genae obtusely produced and weakly raised, minutely punctate; eyes large and transverse, narrowly laterally arched; interocular space a little narrower than eye diameter, weakly and roundly depressed, scarcely punctate; antennae medium-sized, reaching basal 1/4 of elytra, feebly thickened toward apical joint, 7th to 10th joint dilated to apex, 11th oblong ovoid, relative length of each joint (base to apex): 3.6, 1.4, 3.8, 3.1, 2.8, 2.7, 2.8, 2.7, 2.6, 2.5, 2.3.

Pronotum transverse (23.0 : 12.5), broadest at base, gradually narrowed from base to basal 1/3, then rather strongly and sublinearly narrowed to front; front border widely, roundly emarginate and sublinear in median half, finly margined; basal border broadly produced, sinuate on both sides, shortly straight opposite scutellum; sides very steeply declined, finely margined; front angles subrectangular; hind angles obtusely angulate; disc strongly convex above, rather closely and strongly punctate, punctures not large but deep. Scutellum triangular with sides slightly rounded, weakly convex, sparsely punctate, punctures small and subequal to those on elytra.

Elytra large, twice as long as broad, broadest at middle, gradually narrowed to front and rear; dorsum strongly convex above and steeply declined laterally; disc punctate-striate, striae fine with rather large punctures set about one diameter apart in inner portion, 2-3 diameters in lateral portions; intervals flat and wide, very minutely punctate; sides narrowly margined.

Mentum subcordate, truncate at base, raised in anterior-median portion, shallowly rugose; gula triangular, wrinkled posteriorly, bordered from gena by short groove on both sides; terminal joint of maxillary palpi relatively large, slightly curved outer side about 1.3 times as long as

Tirbe Helopini

***Tarpela zoltani* sp. nov.**

Blackish brown; antennae, legs, mouth organs, gula more or less lighter in color; upper surface bearing purplish metallic luster. Elongate and slightly widened posteriorly; moderately convex above.

Head transverse, moderately convex above, closely and minutely punctate throughout; frons shortly sloping; front-clypeal border rather widely depressed; clypeus transverse, widely and straightly truncate in front, feebly convex, more closely punctate and pubescent anteriorly, front margin with both ends shortly and obliquely rounded; labrum transverse with rounded sides, truncate and very feebly emarginate in front, closely and finely punctate and pubescent; gena-clypeal border obliquely and finely grooved; genae nearly flat, closely punctate like clypeus, moderately bent downward in posterior portion, with outer margin rounded; eyes medium-sized, slightly oblique, moderately laterally arched; interocular space about 3 times eye diameter, with shallow impression near eye on both sides; tempora suddenly but roundly narrowed after eyes; antennae slender, reaching basal 1/4 of elytra, only slightly thickened toward apex, rather densely covered with long hairs, 8th to 10th joint dilated to apex, 11th oblong oval, relative length of each joint (base to apex): 2.8, 2.0, 4.0, 3.0, 3.0, 3.2, 3.0, 3.2, 3.2, 3.0, 3.2.

Pronotum trasverse (26.0 : 17.5), broadly laterally arched, broadest at middle, very feebly, shortly sinuate before base; front border nearly straight, weakly sinuate on both sides, finely margined, margin interrupted at median 1/4; basal border bisinuate and comparatively thickly margined; sides finely margined; front angles a little obtuse with rounded tip; hind angles subrectangular; disc rather strongly convex above, closely and deeply punctate, punctures a little smaller and sparser than those on head, with shallow median groove, and rather large spot-like impression in middle near lateral margin, small spot-like impression after middle, vague transverse impression near base, and short oblique impression at base, each on both sides. Scutellum semicircular, slightly elevated, rather closely punctate, punctures subequal in size to those on pronotum.

Elytra nearly twice as long as broad (64.0 : 33.0), about 1.3 times as broad as pronotum measured at both broadest points, gradually widened, broadest at basal 3/4, then roundly narrowed toward apex; dorsum moderately convex above, very softly depressed in middle near base, rather strongly depressed around scutellum; disc with rows of small but deep punctures, often finely striated, distance between them varying; intervals nearly flat, impunctate; sides margined, with margin gradually widened toward posterior portion, a little horizontally expanded.

Mentum trapezoid, raised medianly, closely punctate on both sides; gula parabola-shaped and very finely reticulate, shortly bordered by fine grooves; terminal joint of maxillary palpi securiform, arcuate outer side about 1.5 times length of inner and 1.3 times length of apical.

Prosternum finely margined in front, rugose in anterior portion, rather closely punctate in middle, strongly raised between coxal cavities, smooth and minutely punctate, with prosternal process small but pointed; mesosternum with hind margin raised in V-shape and rugose; metasternum rather closely and finely setaceously punctate, somewhat rugose in anterior portion. Abdomen rather closely and minutely punctate throughout, shallowly wrinkled in 3 anterior sternites.

Femora moderately thickened; tibiae gradually thickened toward apex, fore tibiae a little dilated at apex and obliquely truncate; tarsi without any peculiarities, relative length of each joint of fore, middle, and hind tarsi as follows: 3.0, 2.0, 2.0, 1.5, 5.0; 3.5, 2.5, 2.0, 1.5, 6.0; 6.0, 3.5, 2.5, 7.0; claws sharp.

Body length: 11 mm.

Holotype: ♀ Alishan (2400m), Chiayi Hsien, Formosa, 10 VI 1977, J. KLAPPERICH leg., (HNHM).

This new species somewhat resembles *Tarpela brunnea* MARSEUL from Japan but differs from the latter in having a more transverse pronotum, rows of punctures on the elytra sparsely set and only sometimes striated, less convex (nearly flat) intervals, and different coloration on the upper surface.

Tarpela formosana sp. nov.

Blackish brown; antennae, legs, mouth organs, undersurface reddish brown; head, pronotum and scutellum rather strongly shining, elytra weakly shining. Elongate and moderately convex above.

Head transverse, weakly convex above, slightly flattened anteriorly, closely punctate, punctures sparser posteriorly; frons shortly and gently sloping forward; clypeus rather widely depressed in posterior portion, very shortly convergent and truncate in front, feebly convex in middle; labrum transverse with rounded sides, feebly convex, closely and finely punctate and pubescent; genae weakly raised, with outer margin oblique anteriorly and subparallel posteriorly; eyes moderate-sized, transverse, convex above and strongly laterally arched; interocular space about 3 times eye diameter, weakly convex; tempora suddenly narrowed after eyes; antennae slender, reaching basal 2/7 of elytra, 8th to 10th joint moderately dilated to apex, 11th oblong oval, relative length of each joint (base to apex): 2.5, 1.8, 4.5, 3.5, 3.0, 3.2, 3.2, 3.0, 2.7, 2.5, 3.5.

Pronotum transverse (23.5 : 18.5), broadest before middle, roundly narrowed toward front and base, very slightly sinuate before base; front border nearly straight, slightly bisinuate, very finely margined but margin interrupted at median 1/5, with eyelash-like setae in front; basal border very feebly bisinuate, comparatively thickly margined; sides finely margined; front angles subrectangular, weakly produced forward in dorsal view; hind angles obtuse; disc moderately convex, rather closely punctate, punctures subequal in size to those on head but relatively sparsely set, with shallow median groove near base, and spot-like impression in middle near lateral margin and short oblique impression at base, each on both sides. Scutellum semicircular, slightly elevated, minutely punctate, punctures subequal in size to those on pronotum.

Elytra twice as long as broad, a little less than 1.3 times as broad as pronotum measured at both broadest points, subparallel-sided in basal 1/4, then slightly widened to rear, broadest at basal 3/5, roundly narrowed toward apex; dorsum moderately convex, softly depressed around scutellary striole; disc rather finely punctate-striate, punctures deep and lengthwise, closely set; intervals moderately convex, minutely punctate, punctures much smaller than those on pronotum, microscopically, feebly reticulate; suture very finely margined and raised from basal 1/3 to apex; sides margined from shoulder to just before apex, margin narrowly, horizontally expanded.

Mentum trapezoid, raised medianly, closely punctate laterally; gula parabola-shaped, microscopically wrinkled; terminal joint of maxillary palpi large, with arcuate outer side about twice length of inner, a little longer than apical.

Prosternum margined in front, closely, minutely punctate and somewhat rugose anteriorly, strongly raised in intercoxal space but not depressed medianly, with prosternal process small but pointed; mesosternum with hind margin strongly raised in V-shape; metasternum smooth, sparsely and minutely punctate, punctures closer in front. Abdomen closely and minutely punctate throughout, shallowly wrinkled in lateral portions of 3 anterior sternites.

Femora moderately thickened; tibiae gradually thickened toward apex, a little strongly dilated at apex; tarsi without any peculiarities, relative length of each joint of fore, middle, hind tarsi as follows: 3.0, 2.0, 1.6, 1.4, 5.0; 3.5, 3.0, 2.5, 2.0, 6.5; 5.5, 3.0, 2.5, 7.5; claws sharp.

Body length: 7-13 mm.

Holotype: ♂ Meifeng, Nantou Hsien, Formosa, 25 IV 1976, K. MASUMOTO leg. paratypes: 2 exs. ditto; 2 exs. Meifeng, 14 VI 1974, 2 exs. 30 VI 1974, 1 ex. Sungkang, Nantou Hsien, 11 VI 1974, H. YOKOYAMA leg.

This species somewhat resembles *Tarpela amamiensis* KASZAB from Amami Oshima Is., but is easily distinguished from the latter in having a less convex body, more transverse eyes, shallower elytral striae, deeper punctures on intervals, and differently shaped antennae.

Tribe Cnodalonini

Hemicera parafoveoseriata **sp. nov.**

Blackish brown; claws, mouth organs, gula, basal portions of fore legs, etc., reddish brown; elytra (except sutural portion and lateral margins) bearing strong greenish and sutural portion and lateral margins purplish metallic luster (in the case of major part of elytra bearing purplish, then sutural portion and lateral margins bearing greenish metallic luster); antennae bearing feeble bluish luster; strongly shining. Oblong oval and strongly convex above.

Head transverse, moderately convex, rather closely and finely punctate; frons shortly sloping forward; frontal suture fine and straight, with both ends bent forward, shortly and obliquely reaching outer margin; clypeus transverse, closely and minutely punctate in basal portion, with membranous apical portion short, convergent toward straight front, impunctate; labrum transverse-oblong, moderately convex, closely punctate and pubescent; genae small, oblique, moderately raised, closely and minutely punctate like clypeus; eyes relatively large, oblique, roundly laterally arched, distance between them about 1.5 times eye diameter; ocular sulcus distinct posteriorly; vertex with shallow spot-like median impression; antennae medium-sized, reaching base of elytra, 6 apical joints flattened and somewhat club-like, 6th to 10th joint dilated to apex, 11th ovoid, relative length of each joint (base to apex): 1.7, 0.7, 1.7, 1.1, 0.9, 1.2, 1.3, 1.5, 1.7, 1.7, 2.7.

Pronotum trapezoid (19.0 : 12.0), broadest at base; front border slightly emarginate, finely margined with interruption at median 1/5; basal border bisinuate, produced in median 1/3, a little roundly truncate opposite scutellum; sides slightly explanate, gently laterally arched, sublinear or feebly sinuate before base, finely margined and a little reflexed; front angles rounded; hind angles a little acute; disc moderately convex, arched anteriorly, very softly flattened near base, obliquely and shortly impressed at basal border on both sides, moderately punctate, punctures a little larger than those on head. Scutellum subcordate, feebly convex, sparsely and minutely punctate.

Elytra about 1.5 times as long as broad, gradually widened, broadest at basal 3/5, then roundly narrowed toward apex; dorsum strongly convex above, thickest at basal 2/5; disc punctate-striate, punctures relatively large and strong, distance between them about 1-2 times their diameter, striae often interrupted, with 5th stria very deep in basal portion; intervals slightly convex, microscopically punctate; base of elytra arched forward on both sides; humeral portions obliquely and slightly swollen; humeral angles shortly protruding below hind angles of pronotum; sides expanded obliquely downward, finely margined and slightly reflexed.

Mentum subquadrate, oblique-sided, narrowed toward truncate base, raised medially, closely and strongly punctate and sparsely pubescent; gula triangular, nearly smooth, shortly grooved on both sides; terminal joint of maxillary palpi relatively large, with arcuate outer side nearly twice length of inner, 1.3 times length of apical.

Prosternum rather short, front border pointed at median and reflexed on both sides, strongly elevated in fusiform medianly (from front border through intercoxal space to prosternal process), elevation margined in middle and in hind portion (prosternal process), process relatively large and triangular; mesosternum short, with hind margin strongly raised in V-shape; metasternum minutely punctate, weakly wrinkled. Abdomen also minutely punctate, a little strongly wrinkled laterally except anal sternite.

Legs relatively long; femora moderately thickened; tibiae gradually thickened toward apex, haired in apical half of inner side, 4 anterior tibiae curved inward, hind tibiae nearly straight; tarsi (except apical joint) densely haired beneath, especially so in fore tarsi, of which 4 basal joints a little dilated, relative length of each joint: 1.9, 1.6, 1.3, 1.3, 3.5; 2.2, 1.6, 1.6, 1.4, 4.6; 4.5, 1.9, 1.6, 4.5, respectively; claws sharp.

Body length 6.5–8.0 mm.

Holotype: ♂ Kuantziling, Tainan Hsien, 29 IV 1971, K. SAKAI leg.; 1 ex. Taihorin, 1 ex. Zentai, (both no detailed data) (HNHM); 2 ex. Kuantziling, 29 IV 1971, 1 ex. Nanshanchi, Nantou Hsien, 16 V 1971, 1 ex. 21 V 1971, K. SAKAI leg.; 1 ex. Lushan, Nantou Hsien, 19 V 1974, K. AKIYAMA leg.; 1 ex. Weichuang, 16 VIII 1978, K. SUGINO leg.; 1 ex. Nanshanchi, 3 V 1979, 1 ex. 5 V 1979, S. TSUYUKI leg.; Sankuang, 29 IV 1979, K. KINUGASA leg.

This new species resembles *Hemicera foveoseriata* KASZAB from Formosa, but is distinguished from the latter in having a body smaller and less widened posteriorly, quite different coloration of the elytra (in the case of *H. foveoseriata*, the elytra striped with reddish and bluish tinges), and smaller and closer elytral striated punctures.

Hemicera sakaii **sp. nov.**

Blackish brown; anterior portions of pronotal sides, mouth organs, gula, proepisterna, prosternum, etc., reddish brown; elytra bearing purplish luster, with large portion of disc near base to apex bearing dark greenish luster in certain lights; strongly shining. Ovoid and strongly convex above.

Head strongly transverse, feebly convex, faintly impressed in middle, rather closely and minutely punctate; frons shortly and gently sloping toward fine straight frontal suture; clypeus slightly convex, with posterior half rather closely and finely punctate, anterior half membranous, shortly convergent, transversely impressed and microscopically shagreened in apical portion, straightly truncate in front; labrum transversely oblong with rounded sides, slightly emarginate in front, feebly convex, closely punctate and pubescent; genae nearly transverse, weakly raised, with outer margin feebly laterally arched, finely punctate like clypeus; eyes large and a little oblique, rather strongly laterally arched; interocular space equal to eye diameter; antennae medium-sized, reaching base of elytra, 6 apical joints flattened and somewhat club-like, 6th to 10th dilated to apex and clearly transverse, 11th ovoid, relative length of each joint (base to apex): 1.5, 0.7, 1.4, 1.0, 0.8, 1.1, 1.1, 1.5, 1.4, 1.5, 2.0.

Pronotum transverse (22.5 : 12.5), broadest at base, sublinearly and feebly narrowed in basal 1/3, then roundly narrowed to front; front border nearly straight, narrowly but deeply margined, with margin interrupted at median 1/5; basal border bisinuate, straightly truncate opposite scutellum; sides explanate, margined and slightly reflexed; front angles rounded; hind angles subrectangular; disc strongly convex, arched anteriorly, very faintly and obliquely impressed at base on both sides, rather closely and finely punctate throughout. Scutellum tongue-shaped with fairly acute tip, scattered with minute punctures anteriorly.

Elytra about 1.5 times as long as broad, slightly broader than pronotum at base, gently widened in basal 1/4, then fairly strongly widened to rear, broadest at basal 2/3, and roundly narrowed to apex; dorsum very strongly convex above, thickest at basal 2/5; disc with rows of punctures (mostly finely striated), 4th and 5th rows (or striae) conspicuous, latter especially deep and reaching basal border; intervals nearly flat, slightly elevated just after scutellum, scattered with minute punctures, these rather smaller than those on pronotum but deep; humeral portions relatively largely swollen; sides expanded obliquely downward, finely margined and slightly reflexed.

Mentum transverse, oblique-sided, raised in anterior-median portion, closely punctate and sparsely pubescent; gula relatively large, parabolic, smooth, with crescent-shaped groove on both sides anteriorly; terminal joint of maxillary palpi large, with arcuate outer side nearly twice length of inner, 0.8 times length of apical.

Prosternum short, reflexed in front, raised in intercoxal space and bisulcate, smooth anteriorly, with prosternal process depressed and triangular, rugose like posterior portion of intercoxal space, finely rimmed; mesosternum very narrow, with hind border distinctly elevated in V-shape, each apex of elevation sharply pointed; metasternum shallowly wrinkled, rather closely and minutely punctate in middle, sparsely so on both sides, obsoletely punctate and coriaceous laterally. Abdomen rather sparsely and minutely punctate, shallowly wrinkled in 3 anterior sternites with shallow depression across 3rd and 4th sternites on both sides.

Legs rather short; femora fairly strongly thickened, smooth, rather sparsely scattered with minute punctures; tibiae rather closely and setaceously punctate, haired in apical 1/3 of inner side; tarsi with each joint slightly dilated to apex, relative length of fore, middle and hind tarsi: 2.0, 1.4, 1.2, 1.0, 3.4; 2.4, 1.8, 1.5, 1.4, 3.5; 3.5, 2.0, 1.5, 4.0, respectively; claws sharp,

Body length: 5.5–6.5 mm.

Holotype: ♂ Nanshanchi, Nantou Hsien, Formosa, 16 V 1971, K. SAKAI leg., paratypes: 22 exs. ditto, 11 exs. 21 V 1971, K. SAKAI leg.; 1 ex. Lushan, Nantou Hsien, 26 V 1973, K. MASUMOTO leg.; 1 ex. Lushan, 26 V 1973, H. YOKOYAMA leg.; 1 ex. Nanshanchi, 28 V 1975, K. AKIYAMA leg.

There is no known *Hemicera* species allied to the new species; this species somewhat resembles *Platydema* (Diaperini).

Hemicera kurosawai sp. nov.

Blackish brown; basal half of antennae, margins of pronotum, tarsi, basal portions of femora, mouth organs, underside of tibiae, part of undersurface, etc., reddish brown; head bearing bluish and elytra coppery metallic luster; strongly shining. Oblong or fusiform; rather strongly convex above.

Head strongly transverse, rather strongly convex forward, fairly closely and minutely punctate; frons simply but rather steeply sloping forward; frontal suture straight and fine, reaching both anterior portion of ocular sulcus and outer margin; clypeus very wide but short, more closely punctate than frons in posterior half, membranous in anterior half, convergent and straightly truncate in front, impunctate; labrum oblong, pubescent; genae small, rounded and weakly raised, closely and minutely punctate; eyes relatively large, oblique, moderately laterally arched, distance between them a little less than twice their diameter; antennae medium-sized, scarcely reaching base of pronotum, 6 apical joints flattened and somewhat club-like, 6th to 10th joint dilated to apex and transverse, 11th large and ovoid, relative length of each joint from base to apex as follows: 1.5, 0.6, 1.1, 0.6, 0.5, 0.8, 0.9, 1.2, 1.2, 1.2, 1.6.

Pronotum transverse (17.5 : 11.5), moderately laterally arched, broadest at base and/or after middle, weakly sinuate before base; front border nearly straight and very feebly bisinuate, finely margined, but margin obsolete at median 1/5; basal border strongly bisinuate, truncate and weakly emarginate at median 1/4 or opposite scutellum; sides weakly explanate, finely margined and slightly reflexed; front angles a little rounded; hind angles acute and obliquely produced; disc strongly convex, softly arched anteriorly, obliquely and faintly impressed near base on both sides, rather closely and minutely punctate, size of punctures and distance between them nearly same as on head. Scutellum subcordate, flat, scattered with minute punctures.

Elytra twice as long as broad, gradually widened from base to rear, broadest at apical 1/3, then roundly narrowed toward apex; dorsum rather strongly convex; disc finely punctatestriate, punctures notching intervals and rather closely set, distance between them 1–3 times their diameter, less closely set laterally, 5th stria strong and reaching basal border; intervals feebly convex, scattered with microscopically minute punctures; basal border arched forward on both sides; sides weakly expanded obliquely downward, finely margined and slightly reflexed.

Mentum subquadrate, oblique-sided and finely margined, truncate at base, raised medially, rugose and sparsely pubescent; gula triangular and smooth; terminal joint of maxillary palpi relatively large, with slightly arcuate outer side about 1.4 times length of apical and 2.2 times length of inner.

Prosternum short, nearly smooth, finely reflexed in front, with median portion from front border through intercoxal space to prosternal process continuously raised nearly in fusiform, finely punctate, a little rugosely margined in posterior portion, prosternal process triangular, relatively large, weakly depressed, pointed to rear; mesosternum short, with hind margin strongly elevated in V-shape, each apex of elevation pointed; metasternum long, finely punctate, shallowly wrinkled, obsoletely punctate and coriaceous laterally. Abdomen microscopically shagreened, finely punctate, shallowly and longitudinally wrinkled in 3 anterior sternites and in anterior half of penultimate sternite.

Legs closely and finely setaceously punctate; femora moderately thickened, tibiae weakly thickened and curved inward toward apex; tarsi relatively long, relative length of each joint of fore, middle and hind tarsi: 1.5, 0.8, 0.7, 0.5, 3.5; 2.2, 1.0, 0.9, 0.7, 4.5; 2.9, 1.6, 1.0, 3.5; claws sharp.

Body length: 4.8–6.5 mm.

Holotype: ♂ Kuantziling, Tainan Hsien, Formosa, 29 IV 1971, K. SAKAI leg., paratypes: 1 ex. ditto; 1 ex. Meifeng, Nantou Hsien, 14 VI 1974, 1 ex. ditto, 30 VI 1974, H. YOKOYAMA leg.; 1 ex. Lushan, Nantou Hsien, 19 V 1974, K. AKIYAMA leg.; 3 exs. Juisui, Hualien Hsien, 24 VI 1974, H. YOKOYAMA leg.; 1 ex. Fenchihu (1400m), Chiayi Hsien, 11 IV 1977, 1 ex. 20 V 1977, J. KLAPPERICH (HNHM); 1 ex. Lushan, Nantou Hsien, 26 IV 1978, K. MURAKAMI leg.

This unique new species is named after Dr. Y. KUROSAWA.

***Gauromaia tenuefasciata formosana* subsp. nov.**

This new subspecies is distinguished from the nominate form from Tonkin by the following: 1) the pronotum is less closely punctate, 2) the elytra bear rows of somewhat foveolate punctures (in the case of the nominate form, the punctures are clearly striated), 3) the basal portion of the elytra is purplish, narrowly margined with indigo-bluish tinges.

Relative length of major parts as follows:

1) antennae (base to apex): 2.0, 1.3, 2.0, 1.8, 1.5, 1.5, 1.8, 2.0, 2.0, 2.0, 3.0

2) fore, middle and hind tarsi (base to apex): 2.5, 1.8, 1.6, 1.4, 5.2; 3.5, 2.3, 1.8, 1.6, 5.5; 4.0, 2.3, 2.0, 5.5

3) pronotum (breadth: length): 24. 0 : 17. 5

4) elytra (length: breadth): 57. 0 : 31. 5.

Body length: 9. 5-13. 0 mm.

Holotype: ♂ Jiyue-tan, Nantou Hsien, Formosa, 22 X 1971, K. MASUMOTO leg.; paratypes: 3 exs. Kenting, Pingtung Hsien, 31 V 1973, H. YOKOYAMA leg.; 1 ex. Chipeng, Taitung Hsien, 13 V 1971, K. SAKAI leg.; 1 ex. Sanping, 18 VIII 1978, K. SUGINO leg.

Oedemutes hirashimai formosanus subsp. nov.

The new subspecies differs from the nominate form from the Ryukyu Is. in the following points: 1) the head is more convex in the posterior portion 2) the clypeus is more deeply emarginate in front, 3) the pronotum is more transverse and more convex above, 4) the elytra is more strongly convex above, and the thickest point is a little more before (at about basal 1/3), 5) the elytral striated punctures are more closely set.

Relative length of major parts as follows:

1) antennae (base to apex): 3. 0, 2. 0, 3. 5, 2. 5, 2. 5, 2. 5, 2. 5, 2. 5, 2. 5, 2. 5, 3. 5

2) fore, middle and hind tarsi (base to apex): 3. 5, 2. 5, 2. 0, 1. 8, 7. 5; 3. 5, 2. 5, 2. 0, 1. 8, 8. 0; 4. 5, 2. 5, 2. 0, 8. 5

3) pronotum (breadth: length): 37. 5 : 25. 0

4) elytra (length: breadth); 69. 0 : 47. 0.

Body length: 12 mm.

Holotype: ♂ Kenting Park, Pingtung Hsien, Formosa, 5-6 IV 1978, K. MURAKAMI leg.

Phaedis taiwanus sp. nov.

Blackish brown; 6 basal joints of antennae, mouth organs, part of undersurface reddish brown; pronotum and elytra bearing weak purplish metallic luster; rather strongly shining. Oblong oval and moderately convex above.

Head a little transverse, flattened, feebly convex posteriorly, closely and a little coarsely punctate; frons gently sloping and rather rugose; frontal suture fine and straight, with both ends bent forward, then reaching outer margin; clypeus truncate and very feebly, slightly emarginate in front, with both sides obliquely rounded, very slightly convex in posterior portion, closely punctate, punctures closer and finer anteriorly and rather rugose posteriorly; genae relatively large, closely and finely punctate, a little rugose in anterior half, softly depressed in posterior half, with outer margin oblique in anterior half, subparallel in rest; eyes moderate-sized, roundly laterally produced, distance between them about 2. 3 times their diameter; ocular sulcus narrow but deep; tempora shortly narrowed after eyes, then strongly constricted; antennae relatively short, reaching basal 1/4 of pronotum, 5 apical joints flattened and somewhat club-like, relative length of each joint (base to apex): 3.0, 1.5, 4.0, 3.0, 2.5, 2.5, 2.5, 2.5, 2.5, 2.5, 3.0.

Pronotum about 1.4 times as broad as long, laterally arched, broadest after middle, clearly sinuate before base; front border nearly straight, rather finely margined except at median 1/3; basal border bisinuate, completely and comparatively thickly margined, slightly and roundly produced to rear at median 1/4; sides narrowly margined, slightly reflexed; front angles subrectangular; hind angles acute; disc moderately convex, widely and softly flattened in middle, softly impressed near front border and rather strongly so at basal 1/3, each on both sides, rather closely and strongly punctate, punctures smaller and closer in anterior and lateral portions, with short median impression posteriorly. Scutellum triangular with moderately rounded sides, depressed, sparsely scattered with minute punctures.

Elytra approximately 1.7 times as long as broad, subparallel-sided in basal 2/7, gradually widened, broadest at 4/7, then roundly narrowed toward apex; dorsum rather strongly convex above, declined in front in basal portion, thickest before middle; disc finely punctate-striate, punctures strong, distance between them about 1–3 times their diameter; intervals very feebly convex, rather closely and microscopically punctate; humeral portions weakly swollen; basal border arched forward on both sides; sides a little expanded obliquely downward, finely but completely margined and slightly reflexed.

Mentum tongue-shaped, distinctly projected, closely punctate, sharply gouged on both sides; gula nearly smooth, shortly grooved near apex on both sides; terminal joint of maxillary palpi not very large, with arcuate outer side about 1.5 times as long as inner and subequal to apical.

Prosternum margined in front, a little rugose in anterior portion, raised between coxal cavities and softly depressed, with prosternal process triangular with rounded tip; mesosternum with hind margin strongly raised in V-shape and slightly rugose; metasternum shallowly wrinkled, sparsely punctate laterally. Abdomen rather closely and finely punctate, shallowly wrinkled in 3 anterior sternites.

Fore femora moderately thickened with sharp laminate tooth along front margin at apical 1/3; fore tibiae feebly curved inward, middle tibiae curved in- and slightly upward, hind tibiae so only inward, remarkably scraped and haired apical 1/3 of inner margin; relative length of each joint of fore, middle and hind tarsi as follows: 4.0, 2.5, 2.5, 2.0, 9.0; 4.5, 2.8, 2.5, 2.0, 10.0; 7.5, 4.5, 4.0, 10.5; claws stout.

Body length: 15.5mm.

Holotype: ♂ Paling, Taoyuan Hsien, Formosa, 25 IV 1979, Y. KUSUNOKI leg.

There is no known species from the Oriental region allied to this conspicuous new species.

Phaedis mushanus sp. nov.

Blackish brown; elytra bearing bluish or purplish luster; moderately shining. Oblong oval and moderately convex above.

Head a little transverse, flattened, weakly convex in posterior portion, closely and shallowly punctate; frons simply and gently sloping forward, sparsely punctate; frontal suture obsolete and feebly arcuate backward, with both ends bent obliquely forward and reaching outer margin; clypeus very wide, truncate and feebly emarginate in front, with sides obliquely rounded, weakly convex in middle, closely and finely punctate; genae with outer margin oblique in anterior half, subparallel in posterior, flat anteriorly and depressed posteriorly, closely and finely punctate; eyes relatively large and transverse, narrowly laterally arched, distance between them about twice their diameter; ocular sulcus deep, with longitudinal ridge-like elevation just inside; antennae rather short, reaching basal 1/3 of pronotum, 5 apical joints flattened and somewhat club-like, relative length of each joint (base to apex): 2.5, 1.2, 2.5, 1.8, 1.5, 1.5, 2.0, 2.5, 2.5, 2.5, 3.0.

Pronotum transverse (27.0 : 18.0), roundly laterally arched, broadest after middle, weakly sinuate before base; front border feebly sinuate on both sides, margined except in median 3/5; basal border bisinuate and relatively thickly margined; sides finely margined, slightly reflexed; front angles obtuse; hind angles subrectangular; disc moderately convex, very faintly flattened in posterior-median portion, feebly swollen in lateral portions, rather deeply punctate, punctures smaller and closer laterally. Scutellum triangular with rounded sides, depressed, scattered with minute punctures.

Elytra about 1.6 times as long as broad, subparallel-sided in basal half, broadest at 4/7 from base, then roundly narrowed toward apex; dorsum rather strongly convex; disc punctate-striate, punctures medium-sized but deep, distance between them about 1–3 times their diameter; intervals nearly flat, scattered with microscopic punctures; humeral portions weakly swollen; basal border arched forward on both sides, finely margined and slightly reflexed; sides feebly expanded, finely margined and slightly reflexed.

Mentum ovoid, projected, rugose, strongly gouged on both sides, raised medianly; gula minutely punctate, shortly grooved on both sides anteriorly; terminal joint of maxillary pulpi relatively large, with rounded outer side 1.7 times length of inner, subequal to apical.

Prosternum margined in front, longitudinally wrinkled, a little rugose, moderately raised in intercoxal space and softly depressed medianly, nearly smooth, with prosternal process relatively large and triangular with rounded tip; mesosternum with hind margin strongly elevated in V-shape, each apex of elevation pointed; metasternum nearly smooth, shallowly wrinkled, sparsely punctate on both sides. Abdomen rather closely and finely punctate, wrinkled in anterior half of each side of 3 anterior sternites.

Fore femora rather strongly thickened, with thin but sharp tooth at apical 1/3 of front margin; tibiae simply thickened toward apex and curved inward, haired in apical half of each inner side of 4 posterior tibiae; tarsi rather large, relative length of each joint of fore, middle and hind tarsi as follows: 2.0, 1.4, 1.4, 1.2, 3.5; 2.0, 1.5, 1.5, 1.3, 6.5; 4.5, 2.5, 2.0, 7.0; claws sharp.

Body length: ca. 10mm.

Holotype: ♂ Musha (Wushe), Nantou Hsien, Formosa, 25, IV 1927, T. KANO leg.

This new species somewhat resembles *P. marmoratus* M.T. CHÛJÔ, from the Ryukyu Is., but the new species has a smaller and less convex body, larger protibiae, well-developed protibial teeth, and a more transverse pronotum.

Gnesis liukueiensis sp. nov.

Blackish brown; claws, mouth organs, undersurface (partly) more or less reddish; hairs of apical portion of tibiae and underside of tarsi yellowish-brown; pronotum weakly and elytra strongly bearing purplish metallic luster; rather strongly shining. Oblong and moderately convex.

Head transverse, flattened anteriorly, moderately convex above posteriorly, closely punctate, punctures a little coalescent posteriorly, less closely set in middle, frons and vertex continuous; frontal suture nearly straight, with both ends obliquely growing toward outer margin; clypeus wide, nearly straightly truncate in front, with sides obliquely rounded; very feebly convex, closely punctate, punctures finer and closer toward apex; genae with outer margin narrowly rounded in anterior 1/3, then obliquely and obtusely produced in middle, subparallel-sided in posterior 1/3, closely and finely punctate; ocular sulcus narrow; eyes medium-sized, moderately laterally arched, distance between them a little less than 4 times thier diameter; tempora very shortly laterally produced after eyes, then suddenly narrowed; antennae short, 5 apical joints flattened and somewhat club-like, reaching middle of pronotum, relative length of each joint (base to apex): 2.5, 1.0, 2.6, 1.8, 1.8, 1.8, 1.8, 2.0, 2.0, 2.0, 3.5.

Pronotum transverse (25.5 : 17.5), widely laterally arched, broadest before middle, shortly subparallel-sided before base; front border nearly straight, finely margined but margin obsolete at median 1/3; basal border bisinuate and margined, with median half slightly arched to rear; sides clearly margined; front angles narrowly rounded; hind angles subrectangular; disc moderately convex above, obliquely and softly impressed near front border and also near base, each on both sides, unevenly punctate, punctures strong but not so large, smaller in anterior portion.

Scutellum small, triangular, faintly depressed, sparsely scattered with minute punctures.

Elytra about 2.4 times as long as broad, gently widened posteriorly, broadest at basal 4/7, then roundly narrowed toward apex; dorsum rather strongly convex; disc punctate-striate, punctures medium-sized and deep, distance between them about 1–3 times their diameter, those in outer portion sparsely set; intervals feebly convex, those in lateral and posterior portions more strongly convex, minnutely punctate; humeral portions feebly swollen; sides feebly expanded obliquely downward, finely margined, slightly reflexed.

Mentum subhexagonal, raised medially, strongly punctate and rugose on both sides; gula relatively large, parabolic, microscopically reticulate, shortly grooved near apex on both sides; terminal joint of maxillary palpi with slightly arcuate outer side about twice length of inner and 0.8 times length of apical.

Prosternum rugosely margined in front, wrinkled anteriorly, gradually raised toward medianly grooved intercoxal space, with prosternal process relatively large, triangular and horizontal; mesosternum short with hind margin raised in V-shape; metasternum finely punctate and shallowly wrinkled, rather strongly punctate and clearly wrinkled laterally. Abdomen rather closely punctate, shallowly wrinkled in 3 anterior sternites, with anal sternite faintly depressed in middle.

Legs relatively short, closely punctate; fore femora rather strongly thickened, with thin but sharp tooth at apical 1/3 along front margin, 4 other femora simply and moderately thickened; tibiae weakly thickend toward apex, rather densely haired in apical portion of inner side; tarsi without any peculiarities, relative length of each joint of fore, middle and hind tarsi as follows: 2.5, 1.6, 1.4, 1.2, 5.5; 2.8, 1.6, 1.4, 1.2, 6.0; 3.0, 2.0, 1.8, 6.5; claws sharp.

Body length: 10.5 mm.

Holotype: ♂ Bisyô (Weichuang), Liukuei, Kaohsiung Hsien, Formosa, 17 V 1977, J. ITO leg.

This species somewhat resembles *Gnesis formosanus* (M.T. CHÛJÔ), but is differentiated from the latter in having a relatively larger, clearly oblong and less convex body, a more transverse pronotum, and intervals of the elytra scattered with fine punctures.

The new species may be the same as that recorded by H. GEBIEN from Formosa, but it is easily distingishable from *Gnesis helopioides* PASCOE in having a larger, more oblong and less convex body, and a differently sized and shaped aedeagus.

***Obriomaia pseudorufiventris* sp. nov.**

Reddish brown to blackish brown; elytra darker and bearing greenish metallic luster; strongly shining. Elongate oblong and convex above.

Head transverse, strongly convex in posterior portion, evenly and rather closely punctate; frons rather steeply sloping forward; frontal suture fine and nearly straight, with both ends bent forward and somewhat arcuately curved, then reaching outer margin; clypeus transverse, nearly straightly truncate in front, with oblique sides, feebly convex, minutely punctate, punctures closer in anterior portion; labrum also transverse, roundly convergent forward, nearly straight in front, bent downward apically, finely punctate and pubescent; genae weakly raised, finely punctate, with outer margin oblique in anterior 2/3 and nearly parallel before eyes; eyes medium-sized, roundly laterally arched, distance between them about twice their diameter; antennae relatively short, reaching basal 1/3 of pronotum, 6 apical joints softly flattened and somewhat club-like, 11th ovoid, relative length of each joint (base to apex): 1. 8, 1. 0, 1. 8, 1. 5, 1. 5, 1. 5, 1. 5, 1. 8, 1. 8 1. 8, 2. 5.

Pronotum transverse (22. 0 : 16. 0), strongly laterally arched, broadest before middle, roundly narrowed to front and base, remarkably sinuate before base; front border feebly arched forward, not margined; basal border bisinuate, coarsely margined; sides remarkably margined; front angles obtuse; hind angles subrectangular; disc strongly convex above, rather strongly bulged anteriorly, closely and strongly punctate. Scutellum triangular with rounded tip, smooth and weakly depressed in middle.

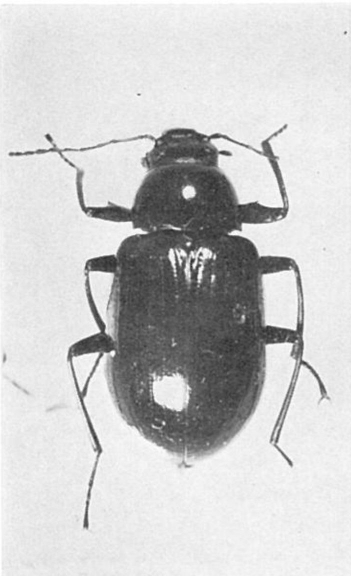
Elytra about 1. 8 times as long as broad, feebly widened and broadest after middle, then roundly narrowed toward apex; dorsum strongly convex above, thickest at middle, faintly flattened after scutellum, weakly swollen in humeral portions; disc punctate-striate, punctures strong, distance between them about 1/2-1 times their diameter in inner portion, 1-3 times in outer, strongly depressed in basal portion of 5th stria; intervals nearly flat, sparsely scattered with microscopic punctures; sides feebly expanded obliquely downward, finely margined and slightly reflexed.

Mentum trapezoid, coarsely punctate, raised in anterior-median portion; gula nearly smooth, shortly but deeply bordered on both sides; terminal joint of maxillary palpi securiform, with arcuate onter side about 1. 8 times length of inner and 1. 3 times length of apical.

Prosternum strongly punctate, closely so near front border, raised in intercoxal space, with prosternal process sharply pointed to rear; mesosternum short, with hind margin elevated in V-shape and rugose, each apex of elevation pointed; metasternum closely and strongly punctate in anterior portion, sparsely and coarsely so in lateral, rather sparsely and finely so in rest. Abdomen rather closely and minutely punctate, more so in 2 apical sternites.

Legs closely punctate; femora moderately thickened; fore tibiae feebly curved in- and downward, middle tibiae in- and upward, hind tibiae only feebly upward, each moderately thickened toward apex; tarsi with apical joint rather stout, relative length of each joint of fore, middle and hind tarsi as follows: 1. 3, 0. 9, 0. 8, 0. 7, 3. 5; 2. 0, 1. 0, 0. 9, 0. 8, 5. 0; 2. 8, 1. 5, 1. 2, 5. 0; claws large and sharp.

Body length: 4. 5-5. 5 mm.



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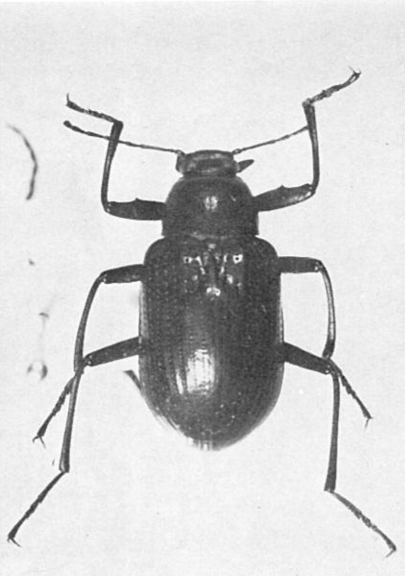

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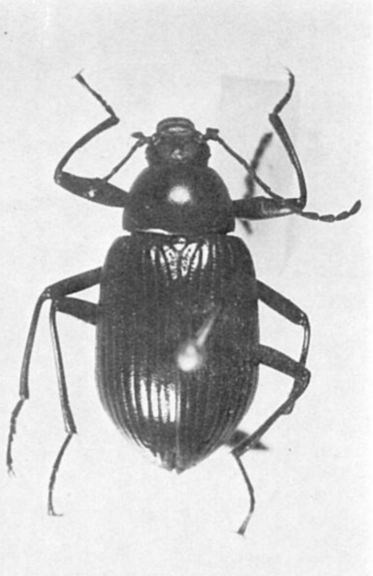

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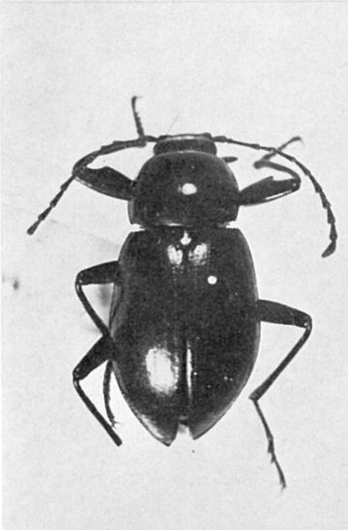

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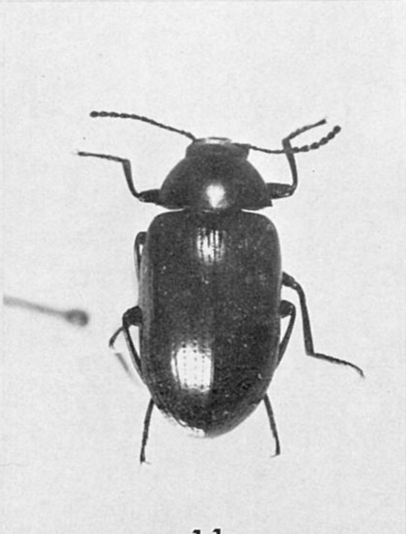

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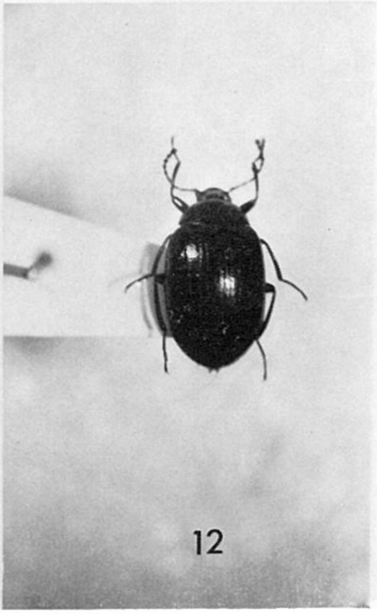

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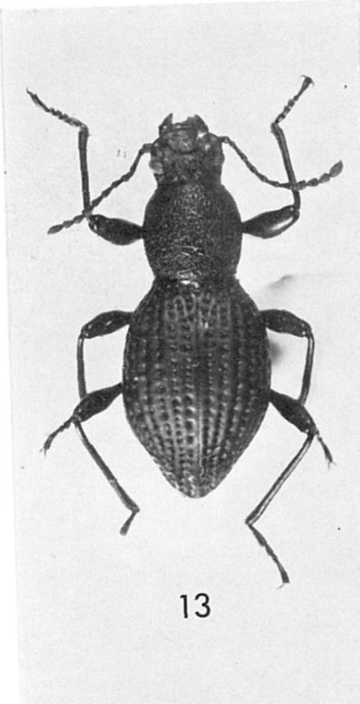
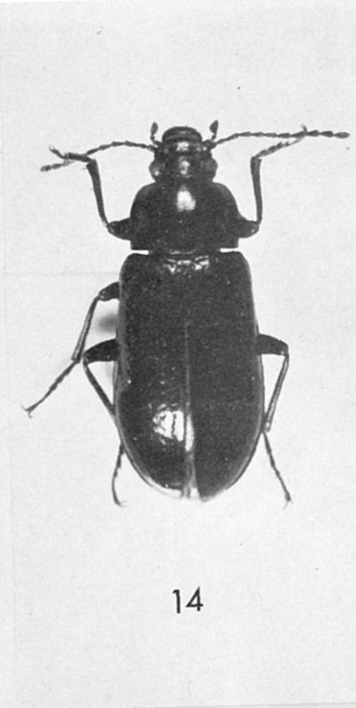
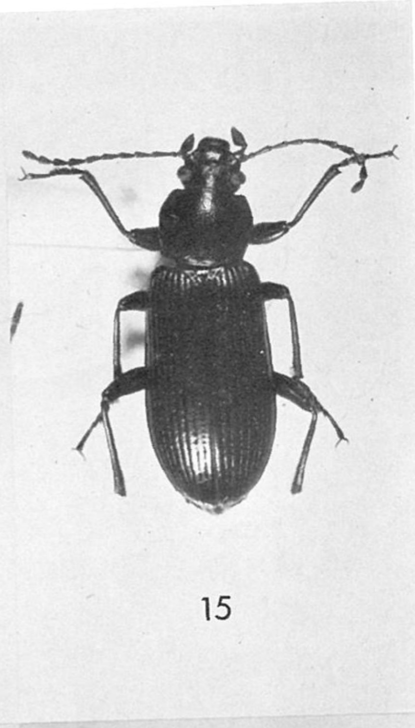
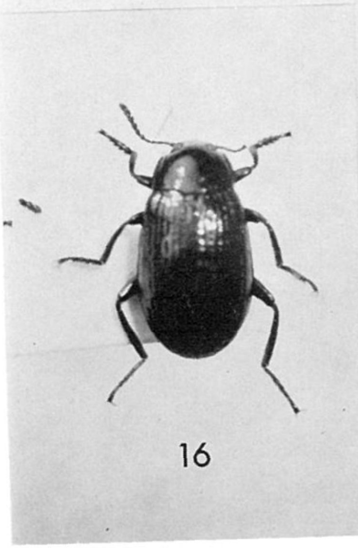
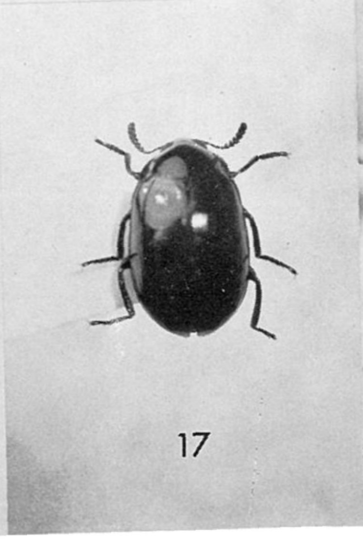
写真 : 7. *Cyriogeton fujitai* sp. nov., ♀ (holotype)　8. *Cyriogeton nanshanchiense* sp. nov., ♂ (holotype)
9. *Plesiophthalmus kanoi* sp. nov., ♂ (holotype)　10. *Plesiophthalmus taiwanus* sp. nov., ♂ (holotype)
11. *Amarygmus sakaii* sp. nov., ♂ (holotype)　12. *Amarygmus taiwanus* sp. nov., ♂ (holotype)

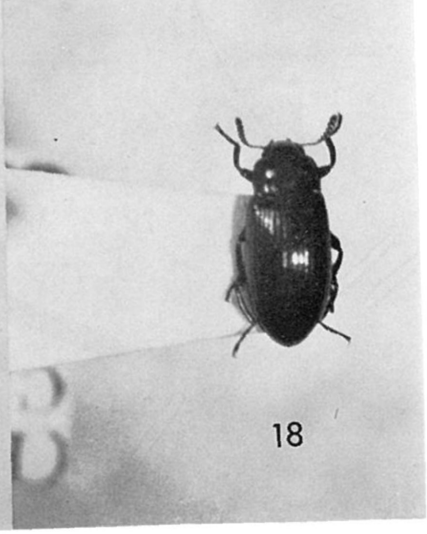




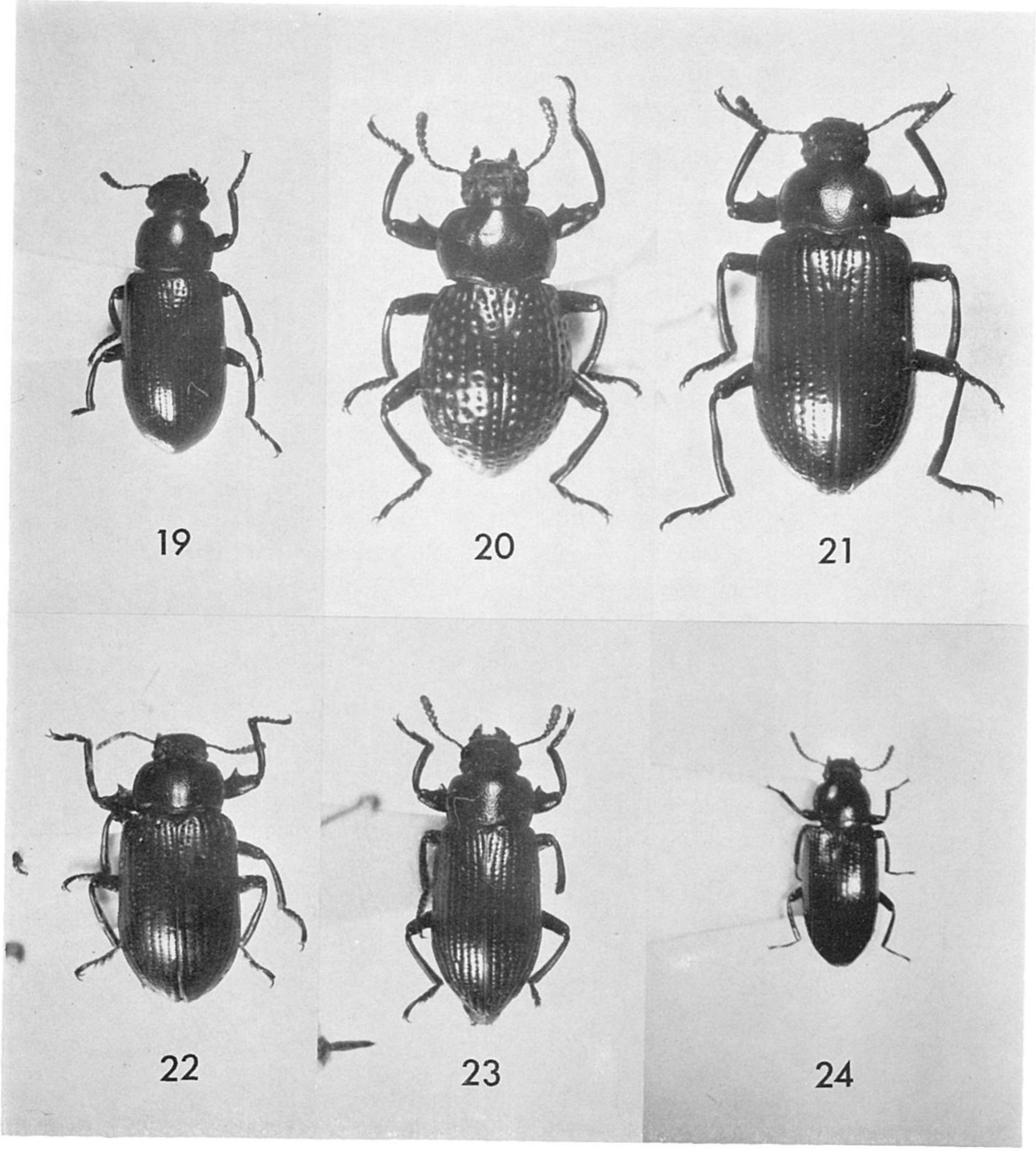








写真：13. *Paramisolampidius formosanus* sp. nov., ♂ (holotype)　14. *Tarpela zoltani* sp. nov., ♀ (holotype)
15. *Tarpela formosana* sp. nov., ♂ (holotype)　16. *Hemicera parafoveoseriata* sp. nov., ♂ (holotype)
17. *Hemicera sakaii* sp. nov., ♂ (holotype)　18. *Hemicera kurosawai* sp. nov., ♂ (holotype)



写真：19. *Gauromaia tenuefasciata formosana* subsp. nov., ♂ (holotype) 20. *Oedemutes hirashimai formosanus* subsp. nov., ♂ (holotype) 21. *Phaedis taiwanus* sp. nov., ♂ (holotype) 22. *Phaedis mushanus* sp. nov., ♂ (holotype) 23. *Gnesis liukueiensis* sp. nov., ♂ (holotype) 24. *Obriomaia pseudorufiventris* sp. nov., ♂ (holotype)

稿 KŌCHŪ 虫

イノウエチビゴモクムシの採集例

井上　寿・花田　勉

イノウエチビゴモクムシ *Acupalpus inouei* HABU は，筆者らが十勝農試構内で螢光誘殺灯（白色20W）により採集した標本が，土生博士（1980）によって新種記載されたものである．

本種は体長3.5 mm内外，体幅1.4 mm内外で，近縁のキイロチビゴモクムシ *A. inornatus* BATES よりもやや小型であり，この属ではもっとも小さい．上翅は黒色で虹色の光沢を有し，斑紋は変化があって，会合線にそった縦紋は翅端部の斑紋と連なって翅端で僅かにふちどられるものから，かなり大きな紋を有するものまであり，また肩紋は消失したものから体のほぼ半ばに達する大型の紋となるものなどがある．

採集例としては，河西郡芽室町において1977年に28頭，1978年は25頭，1979年には49頭で，これらはいずれも螢光灯に飛来したものであり，6月上旬から8月中旬にわたって得られたが6月が最盛期のようである．個体数は少なくないのであるが，螢光灯以外ではこの3年間採集できなかった．ところが本年6月に草地に設置した pit-fall traps で得られ，草地で生活していることはわかったが，これ以上の生活史については目下のところ不明である．

文末ながら同定を賜った土生昶申博士に御礼申しあげる．

1）HABU, A., 1973, Fauna Japonica, Carabidae, Harpalini, 325-337.
2）HABU, A., 1980, Ent. Rev. Jap. 34 (1, 2) : 75-81.

（〒082 北海道河西郡芽室町　十勝農業試験場）

キマダラヒメミヤマカミキリの食樹

平井　勇

キマダラヒメミヤマカミキリ *Dymasius hirayamai* MATSUSHITA は，日本では沖縄県与那国島で採集されているが，幼虫の食樹などに関する報告はない．

筆者は，1980年2月4日に与那国島宇良部岳のハゼノキ（ウルシ科）より，蛹室内にいる本種1♀を割り出した．蛹室は，直径3 cmほどの太さの枯枝の樹皮下に，辺材部を浅く掘って作られたものであった．その後，同島より持ち帰った材から1980年3月23日に別の本種1♀が自宅にて羽化脱出したが，この材の木のなかにハゼノキはなかった．ハゼノキが本種の食樹の1つであることは確認できたが，本種は雑食性であるように思われる．

（〒359 所沢市狭山ケ丘1-3002-11）

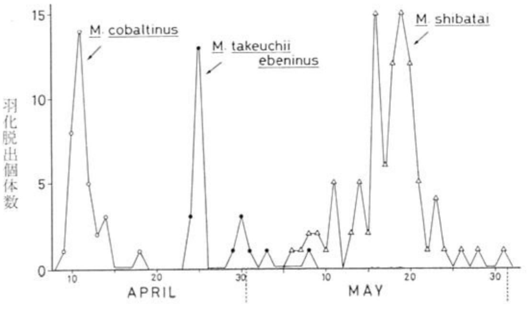
奄美大島産 *Molorchus* 属3種の越冬と羽化

常喜　豊・橋本三郎・黒田祐次

奄美大島産のヒゲナガコバネカミキリ属（*Molorchus*）は，現在のところコバルトヒゲナガコバネカミキリ *M. cobaltinus* HAYASHI，タケウチヒゲナガコバネカミキリ *M. takeuchii ebeninus* HAYASHI，シバタヒゲナガコバネカミキリ *M. shibatai* HAYASHI の3種が知られている（以下，コバルト，タケウチ，シバタと略記）．筆者らは1979年1月，同島において採集を行った際，これら3種の越冬，およびその後の羽化脱出について若干の知見を得たので報告する．

(1)寄生は，コバルトがカラスザンショウ*)（八津野および湯湾岳にて採集），タケウチ・シバタが共にミミズバイ（三太郎峠および赤土山林道にて採集）であり，後2種は同じ枯枝の同じ部分に混在していた．また，現地での割出しによりコバルトとタケウチがすべて成虫で得られたのに対し，シバタは現地で蛹であったものが，持ち帰ってのちに羽化したものである．よってこれら3種の越冬形態は，コバルト，タケウチが成虫，シバタが蛹であると考えられる．

(2)筆者の1人常喜が，京都に持ち帰って室温で放置した材からの成虫の羽化脱出状況は下図のようであり，3種の脱出ピークがはっきりと分かれる．このことは野外における実際の羽化脱出状況を，ある程度反映していると思われる．また，シバタの羽化脱出が，他の2種に比べてより長期にわたってだらだらと続くのは，この種が蛹で越冬することの影響であると考えられ，このことからしても，成虫越冬は発生の斉一化に非常に有利である



と言えそうである.

*) 豊島亮司・加藤泰久(1979) ELYTRA, **7** (1) : 18.

（常喜：〒606 京都市左京区北白川追分町，京都大学
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ヒラヤマコブハナカミキリを７月に採集

平井　勇

ヒラヤマコブハナカミキリ *Pyrotrichus bicolor* (OHBAYASHI) は，本州・四国・九州各地で散発的に記録がみられるが，東京都高尾山以外での採集数は非常に少なく，稀なカミキリの１種である.

筆者は静岡県富士山で７月に本種を採集したので報告する.

１♀, 静岡県富士宮市富士山中腹表富士周遊道駐車場, 3. Ⅶ. 1978（飛翔中の個体）

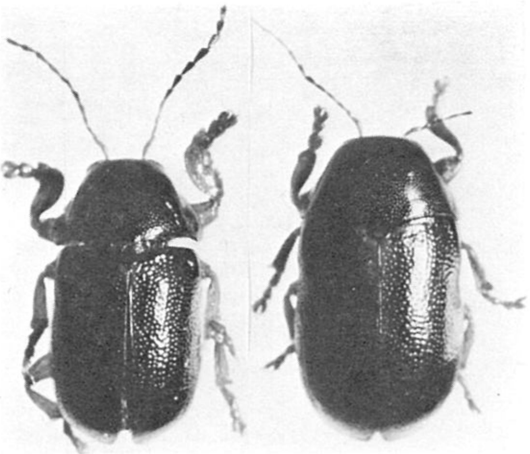
この記録は従来報告されている本種の採集場所の環境，時期，季節感に比べ著しく特異なものと思われる.

（〒336 所沢市狭山ヶ丘1-3002-11）

ツマキクロツツハムシ岡山県に産す

今坂　正一

ツマキクロツツハムシ *Cryptocephalus diformis* JACOBY は，珍しい種のようで，原産地日光，木元による阿寒国立公園（1964）および三重県鳥羽市沖菅島（1980）の３例が知られるのみである.



ツマキクロツツハムシ（左：♂，右：♀）

本種の西限記録となる岡山県産の個体を山地治氏よりいただいているので記録しておきたい.

１♂１♀，岡山市高松町，26. Ⅸ. 1974，山地治採集

同地はケブカマルクビカミキリの多産地として有名であるが，岡山付近の低地に多いただのマツ山に過ぎない．従来の記録はすべて８～10月の採集例であるが，食樹が発見されれば，案外広く分布しているものなのかも知れない.

本種の体色は黒色で，足・触角基部および上翅の側縁・末端部，小楯板周辺は黄褐色である．写真からも分かるように，♂の前脛節は幅広く広がり，*Cryptocephalus* 属の種としてはかなり特異である.

貴重な標本を恵与いただき，発表を許された山地治氏に厚く御礼申し上げる.

（〒855 島原市白土町1064）

編集後記

今号は，益本仁雄氏が印刷費の一部を負担して下さったこともあり，Vol. 6, No. 1 (1978)をしのぐ，ELYTRA はじまって以来の厚い号となりました．毎号このくらいの会誌が出せるとすごいのですが，そのためにはもっと会が大きくならないとだめなのです．身近かな甲虫屋さんで，まだ本会に入っておられない方がいらっしゃいましたら，ぜひ入会を勧めて下さいますようお願いいたします.

そろそろ世代交代（？）を，ということで今回は平山洋人君にも編集を手助ってもらいました.

（1981年５月23日，藤田　宏）

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　　　　平山洋人
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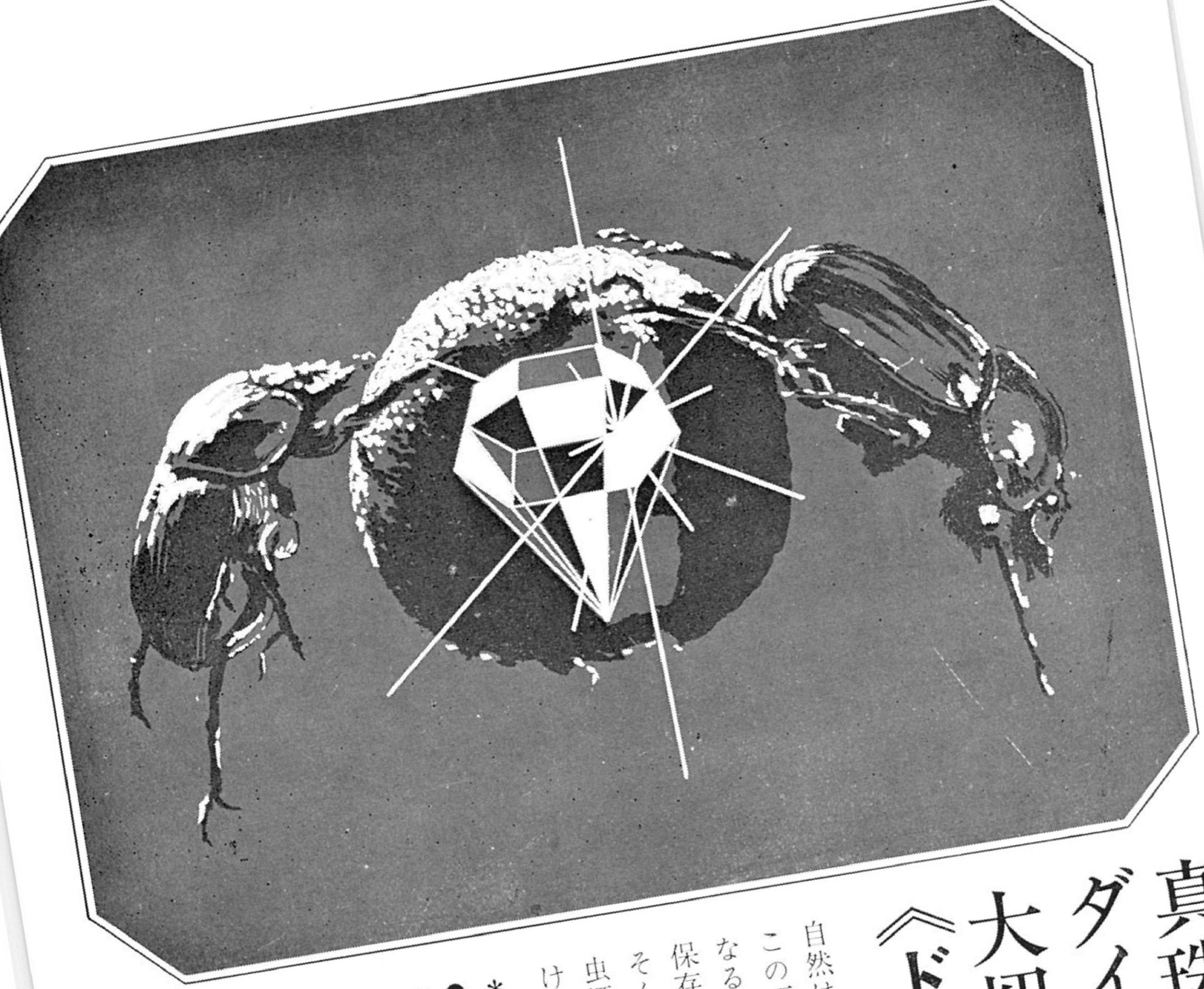

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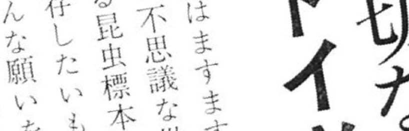

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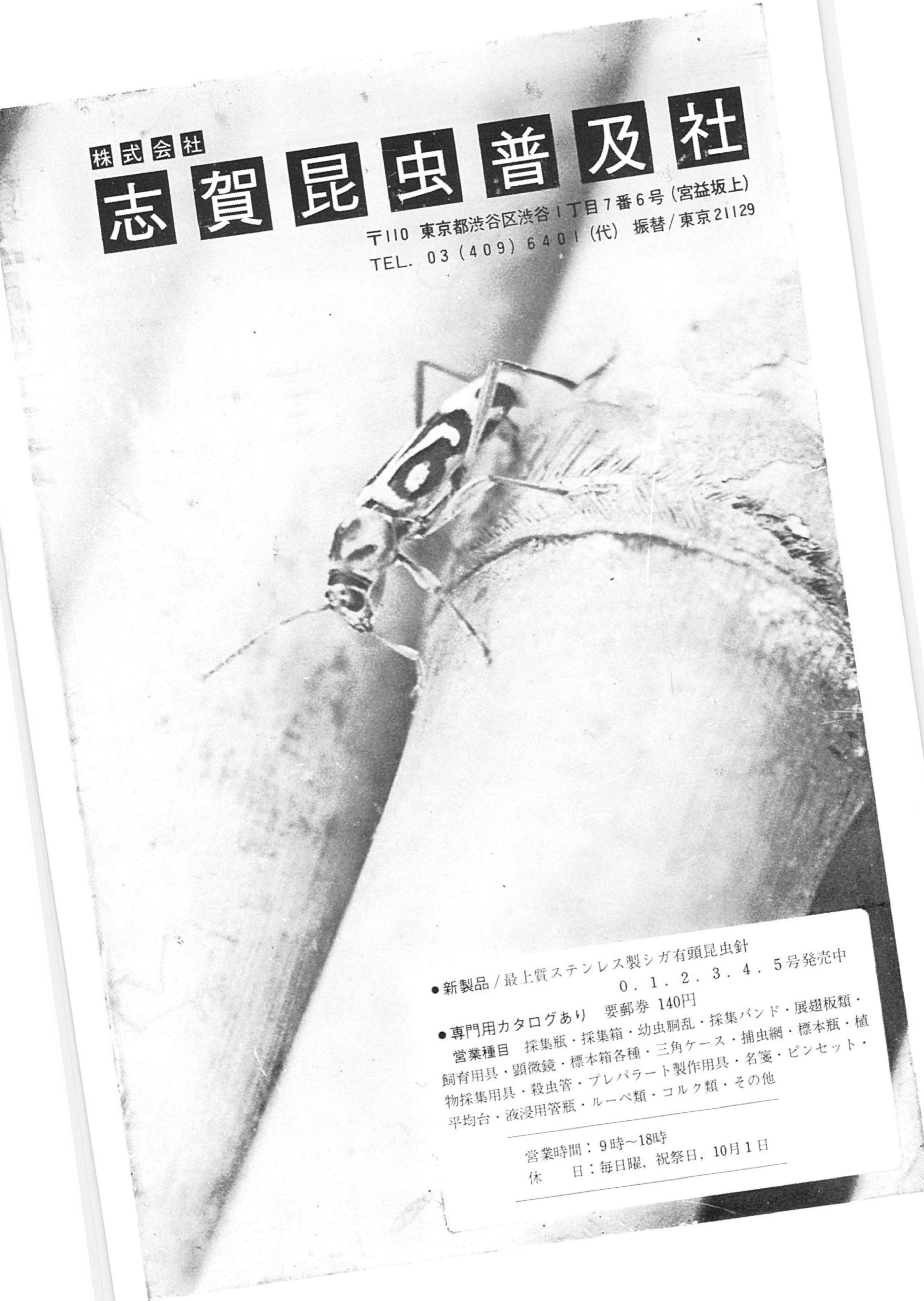

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1. 会　名：本会は日本鞘翅目学会〔The Japanese Society of Coleopterology〕と称する。
2. 目　的：本会は甲虫研究の進展を計り，あわせて甲虫研究者相互の親睦を深めることを目的とする。
3. 総　会：年1回の総会を開くものとする。
4. 活　動：本会は次の活動を行なう。
    a．機関誌「ELYTRA」の発行。　b．第2会誌「さやばね」の発行。
    c．その他，甲虫に関する臨時出版物の発行。
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6. 役　員：本会には会長ならびに若干名の役員をおくものとする。
7. 会　計：会計年度は1ヵ年とし，会計報告を行なう。
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ELYTRA Vol. 9 No. 1 目次

原著

高桑 正敏（TAKAKUWA, M.）：日本産カミキリの再検討 I. *Epania* 属
(A Revisional Study of Japanese Longicornia I. Genus *Epania* PASCOE (Molorchini))……1
石田 正明（ISIDA, M.）：コガネムシに関する知見（2）
(Notes on the Lamellicornia（2))……11
益本 仁雄（MASUMOTO, K.）：台湾産ゴミムシダマシ科解説〔2〕
(Tenebrionidae of Formosa(1))……15

井上 寿・花田 勉：イノウエチビゴモクムシの採集例……53
平井 勇：キマダラヒメミヤマカミキリの食樹……53
常喜 豊・橋本三郎・黒田祐次：奄美大島産 *Molorchus* 属3種の越冬と羽化……53
平井 勇：ヒラヤマコブハナカミキリを7月に採集……54
今坂 正一：ツマキクロツツハムシ岡山県に産す……54
編集後記……54

表紙（フタスジカタビロハナカミキリ）
Cover—*Evodinus* (*Evodinus*) *bifasciata japonicus* MATSUSHITA

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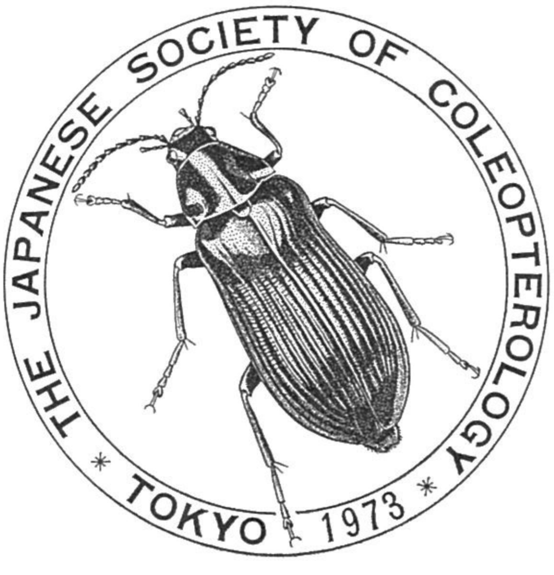
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* TOKYO 1973 *

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(Aug. 1985)

日本鞘翅目学会

The Japanese Society of Coleopterology

Tokyo

Descriptions of the New Species

Falsonannocerus makiharai sp. nov.

Brown, with inner sides of eyes, lateral portions of pronotum, tops of catenules on elytra, tibiae and tarsi blackish brown; moderately, somewhat vitreously shining; surface partly covered with yellowish secretion. Elongate; subcylindrical.

Head transverse-oblong, rather vertical against pronotum in repose, closely, deeply punctate, finely tubercular, raised posteriorly, with fronto-clypeal border deeply sulcate and arcuate posteriad; clypeus transversely elliptic, microscopically tuberculate and reticulate, weakly truncate in front; genae obliquely, feebly produced; eyes medium-sized, convex laterad, distance between them about 2.8 times their transverse diameter; ocular sulci very deep; tempora slightly pointed laterad just behind eyes; antennae medium-sized, reaching basal 2/5 of pronotum, 6 apical segments flattened and club-like, 10th widest, 11th ovoid, relative length of each segment from basal to apical as follows: 2.2, 1.0, 1.9, 0.9, 0.8, 1.1, 1.1, 1.2, 1.3, 1.5, 2.6.

Pronotum trapezoid, 1.3 times as broad as long, broadest just behind the line across front angles, gradually narrowed to rear; front border rather remarkably arcuate forward; basal border feebly arcuate posteriad; sides rather steeply declined with lateral margins weakly explanate anteriorly, crenulate and distinctly so in middle; front angles narrowly rounded; hind angles subrectangular; disk strongly convex longitudinally, coarsely pitted with protruding tubercles throughout. Scutellum subcordate, slightly elevated, sparsely tuberculate.

Elytra approximately twice as long as broad, 3.5 times the length and 1.5 times the breadth of pronotum, broadest at apical 1/3, weakly narrowed to front and moderately narrowed to rear, narrowly rounded in apical portion; dorsum rather strongly, longitudinally convex, thickest at middle, lightly flattened behind scutellum; disk punctate-striate, punctures in striae small and rather closely set; intervals feebly convex, very conspicuously, irregularly catenulate in 3rd, 5th, 7th and 8th, with catenules in outer intervals smaller and more even with one another.

Mentum subcordate with truncate apex; gula rather wide and parabolic; terminal segment of maxillary palpus with arcuate outer side about 1.7 times the length of inner, 1.3 times the length of apical.

Prosternum microreticulate, strongly raised in intercoxal space; prosternal process semicircular, rimmed and depressed; mesosternum depressed, coarsely punctate anteriorly, rather strongly raised in Y-shape and coriaceous in posterior portion; metasternum coarsely punctate, weakly microreticulate laterally, scattered with fine tubercles. Abdomen strongly punctate, punctures finer and closer to apical portion.

Legs rather stout, coarsely and closely punctate, and more or less finely tuberculate, with each tibia weakly indented just before apex of inner side, relative length of each segment of pro-, meso- and metatarsi from basal to apical as follows: 1.8, 1.2, 1.3, 1.5, 5.4; 1.6, 1.4, 1.5, 1.3, 5.6; 2.6, 1.7, 1.8, 6.0, respectively.

Body length: 5.2–6.4 mm.

Holotype: ♂, Benakat (agroforestry), South Sumatra, Indonesia, 2. III. 1983, H. Makihara leg. Paratypes: 4 exs., plantation site, 9. II.; 1 ex., nursery site, 25. II.; 1 ex., ditto, 26. II.; 1 ex., ditto, 28. II.; 1 ex., ditto, 4. III. 1983, H. Makihara leg.

This new species is discriminated from the other known *Falsonannocerus* species by its body being coarsely punctate and finely tuberculate, pronotum with arcuate front border, and elytra conspicuously catenulate on 3rd, 5th, 7th and 8th intervals.

Chaetopsia sumatrensis sp. nov.

This new species resembles *C. angusticollis* Gebien, 1925, but is distinguished from the latter by the following characteristics:

Head strongly raised with obliquely protruding tubercles posteriorly; clypeus weakly and roundly produced forward; antennae with relative length of each segment from basal to apical: 3.2, 1.2, 2.0, 1.1, 0.9, 1.2, 1.5, 1.7, 1.7, 1.8, 3.0.

Pronotum about 0.9 times as broad as long, broadest at the line across front angles, strongly convex above and produced anteriorly; front border overlying vertex; disk very unevenly rugoso-punctate, sparsely covered with rod-like bristles, with longitudinal tumidities in anterior half. Scutellum linguiform, feebly elevated.

Elytra twice as long as broad, 3 times the length and 1.5 times the breadth of pronotum, broadest at apical 3/7; disk with rather irregular rows of non-striated punctures, rather sparsely covered with short rod-like bristles; catenules in intervals longer and stronger, not becoming smaller in outer portions; lateral margins more widely enveloping meso- and metasterna.

Under surface rather closely punctate, almost without bristles.

Legs with relative length of each tarsal segment from basal to apical: 2.0, 1.1, 1.3, 1.8, 4.5; 2.1, 1.4, 1.3, 1.5, 4.8; 3.8, 1.4, 1.4, 5.0, respectively.

Male genitalia as shown in Figs. 5–6.

Body length: 3.8–6.1 mm.

Holotype: ♂, Benakat (plantation site), South Sumatra, Indonesia, 23. II. 1983, H. Makihara leg. Paratypes: 1 ex., plantation site, 9. II.; 1 ex., nursery site, 22. II.; 1 ex., ditto, 25. II.: 1 ex., ditto, 7. III.; 1 ex., natural forest, 17. III. 1983, H. Makihara leg.; 1 ex., Allas Valley, vic. of Gumpang, N. Sumatra (in Természettudományi Múzeum).

Cneocnemis sumatrensis sp. nov.

Reddish brown, with head, lateral margins of pronotum and abdomen in parts darkened, eyes nearly black; moderately shining. Oblong; rather subparallel-sided; moderately, longitudinally convex.

Head somewhat transverse-octagonal, weakly convex above, moderately closely, fairly strongly punctate, punctures sparser in middle, closer and finer anteriorly; fronto-clypeal border slightly depressed with very fine suture; outer margin widely and weakly arcuate in front, oblique on both sides, then feebly produced to both eyes; eyes transverse, weakly convex laterad, distance between them about 3 times their diameter; antennae medium-sized and club-like, reaching middle of pronotum, 6th to 10th segments dilated and transverse, 11th noticeably large and ovoid, relative length of each segment from basal to apical: 1.9, 0.8, 1.3, 1.1, 1.1, 1.1, 1.3, 1.5, 1.4, 1.6, 2.5.

Pronotum subquadrate, 1.3 times as broad as long, broadest at basal 3/5; front border weakly trisinuate; basal border very slightly arcuate posteriad, feebly sinuate on both sides and shortly straight in median 1/5; sides gradually declined to sulcate lateral margins; front angles subrectangular with rounded corners; hind angles obtuse but angulate; disk moderately convex, rather strongly punctate, punctures closer laterally. Scutellum subcordate, smooth, sparsely scattered with fine punctures in basal portion.

Elytra about 1.7 times as long as broad, 2.4 times the length and nearly the same breadth of pronotum, broadest at middle, feebly narrowed forward and moderately, roundly so to rear; dorsum moderately convex above; disk rather strongly punctate-striate, punctures in striae rather small, distance between them about 1.5–2.5 times their diameter; intervals very feebly convex, weakly, rather transversely microreticulate, scattered with minute punctures; sides softly enveloping hind body.

Mentum short pentagonal and densely haired in male, closely punctate in female; gula short and inverted U-shaped; terminal segment of maxillary palpus with arcuate outer side about 1.8 times the length of inner, 1.5 times the length of truncate apical.

Prosternum rather closely punctate, finely so in raised intercoxal space, with blunt prosternal process; mesosternum strongly depressed, coarsely punctate, with V-shaped elevation on hind border; metasternum moderately closely punctate, with median impression in posterior 2/3. Abdomen rather closely punctate, with 3 basal sternites nearly wholly wrinkled and each basal portion of 2 apicals wrinkled longitudinally.

Protibiae in male peculiar, gradually widened, a little twisted and thickened to apex, dentate downwards in apical half along outer margin, bent at apical 2/5 on inner margin, ridged from before middle to apex on the under surface along inner margin and pointed both at apical 1/3 and just before apex; in female, gradually widened to apex, dentate in apical 3/5 along outer margin, very weakly but widely arcuate and shortly emarginate near base on inner margin.

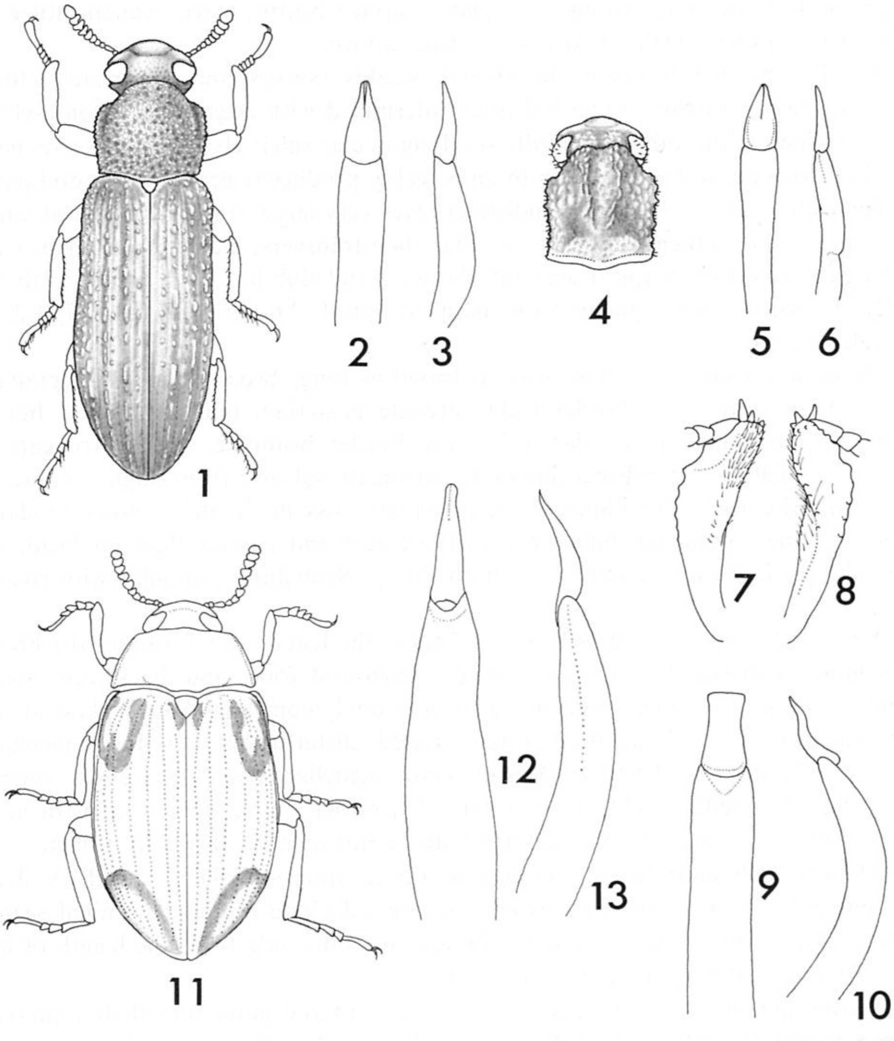
Body length: ca. 7 mm.

Holotype: ♂, Benakat (nursery site), South Sumatra, Indonesia, 10. II. 1983, H. MAKIHARA leg. Paratypes: 1 ex., nursery site, 5. II.; 1 ex., ditto, 6. II.; 1 ex., ditto, 7. II.; 3 exs., ditto, 9. II.; 2 exs., ditto, 10. II.; 2 exs., ditto, 16. II.; 1 ex., ditto, 7. III. 1983, H. MAKIHARA leg.

This new species is easily distinguishable from other *Cneocnemis* species by its remarkable protibiae, male mentum and genitalia.

Hemicera empatanda sp. nov.

Dark blackish brown, with basal half of each antenna, mouth parts, gula, meso-



Figs. 1–13.——1, *Falsonannocerus makiharai* sp. nov., dorsal view; 2, ditto, male genitalia (dorsal view); 3, ditto, male genitalia (lateral view); 4, *Chaetopsia sumatrensis* sp. nov., fore body; 5, ditto, male genitalia (dorsal view); 6, ditto, male genitalia (lateral view); 7, *Cneocnemis sumatrensis* sp. nov., protibia (dorsal view); 8, ditto, protibia (ventral view); 9, ditto, male genitalia (dorsal view); 10, ditto, male genitalia (lateral view); 11, *Hemicera empatanda* sp. nov., dorsal view; 12, ditto, male genitalia (dorsal view); 13, ditto, male genitalia (lateral view).

sternum, basal portion of each leg, and tarsi more or less lighter in color, upper surface bearing reddish violet tinge, head and pronotum partly feebly cyanetic, elytra with iridescent, somewhat oblong patches in humeral portions and postero-lateral portions, and with small cyanetic part just after scutellum on each elytron; fore body moderately shining and elytra more strongly so, under surface bearing dark cyanetic tinge and moderately shining. Oblong; strongly convex above.

Head somewhat transverse-hexagonal, weakly convex and moderately closely, finely punctate, punctures small but often intermixed with larger ones; fronto-clypeal suture straight, with both ends hardly reaching ocular sulci; clypeus transverse, nearly straightly truncate in front with both ends feebly produced; genae rather oblique triangular with gena-clypeal border indistinct; eyes very large, roundly produced laterally, distance between them a little shorter than their transverse diameter; antennae reaching base of pronotum, 6 apical segments flattened and club-like, 10th widest, 11th oval, relative length of each segment from basal to apical: 2.6, 0.6, 1.3, 0.8, 0.7, 1.2, 1.2, 1.3, 1.4, 1.6, 2.4.

Pronotum a little less than twice as broad as long, broadest at base, gradually narrowed to front; front border feebly arcuate posteriad, finely margined but the margin is interrupted in median 1/5; basal border bisinuate, shortly truncate opposite to scutellum; lateral margins rather distinctly sulcate; front angles obtuse and with rounded corners; hind angles subrectangular; disk moderately convex, moderately closely, finely punctate, punctures a little larger and sparser than on head, with short oblique impressions at base on both sides. Scutellum triangular with rounded sides.

Elytra 2.1 times as long as broad, 3.7 times the length and 1.8 times the breadth of pronotum, broadest at middle, roundly narrowed fore- and backward, weakly roundly produced in apical portion; dorsum strongly convex above, thickest at basal 2/5; disk with rows of punctures, often striated, distance between them inconstant and approximately 1.5–2.5 times their diameter; scutellar strioles very short; intervals nearly flat in middle, feebly convex laterally, rather sparsely scattered with microscopic punctures; sides steeply declined with lateral margins distinctly sulcate.

Mentum subquadrate and coriaceous, raised antero-medially, weakly V-shaped in front; gula nearly triangular, strongly impressed along borders; terminal segment of maxillary palpus strongly dilated, with arcuate outer side twice the length of inner one and nearly the same length of apical.

Prosternum short, coriaceous, margined in front and pointed medially, intercoxal space rather noticeably, fusiformly raised and rimmed, with prosternal process acute; mesosternum deeply depressed, with short Y-shaped elevation on hind border and coriaceous; metasternum broad, finely punctate and shallowly wrinkled, with median impression in posterior 3/5. Abdomen rather closely, finely punctate, somewhat longitudinally wrinkled in 3 anterior sternites and also in basal half of 4th.

Legs medium-sized; each tibia moderately widened to apex, relative length of each segment of tarsi: 2.6, 1.5, 1.4, 1.0, 4.0; 3.0, 2.0, 2.0, 1.2, 4.1; 4.2, 2.0, 1.6, 4.5, respectively.

Body length: 6.0–9.5 mm.

Holotype: ♂, Benakat (nursery site), South Sumatra, Indonesia, 5. III. 1983, H. MAKIHARA leg. Paratypes: 1 ex., nursery site, 25. II.; 1 ex., ditto, 5. III.; 1 ex., ditto, 7. III.; 2 exs., ditto, 10. III.; 1 ex., ditto, 11. III.; 1 ex., ditto, 13. III.; 1 ex., ditto, 15. III. 1983, H. MAKIHARA leg.

This new species has noticeable 4 patches on elytra. I have some specimens allied to this new one from Malaysia, though some differences are observed probably due to local variation.

Hemicera tabatai sp. nov.

Dark blackish brown, bearing dark greenish bronzy tinge on upper surface, with mouth-parts and basal half of each antenna lighter in color, femora and tibiae having dark cyanetic luster; strongly metallically shining above. Oblong oval; strongly convex above.

Head transverse, moderately convex, finely punctate; frons rather steeply declined to nearly straight, finely but clearly impressed fronto-clypeal suture, both ends of which are connected with ocular sulci; clypeus short, somewhat transversely crescent-shaped, very feebly bisinuate in front; genae small and oblique-triangular; eyes large and oblique, roundly produced laterally, distance between them about 3/5 times the length of their transverse diameter; antennae reaching basal 2/5 of pronotum, 6 apical segments rather strongly flattened and widened, 10th widest and 11th ovoid, relative length of each segment from basal to apical: 2.1, 0.5, 0.8, 0.6, 0.5, 0.9, 1.0, 1.3, 1.2, 1.4, 1.8.

Pronotum 1.8 times as broad as long, broadest at base, gradually and roundly narrowed to front; front border nearly straight, rather distinctly margined, basal border bisinuate and very slightly bisinuate again in each sinuation, shortly truncate opposite to scutellum; lateral margins rather strongly sulcate and weakly reflexed; front angles obtuse with rounded corners; hind angles subrectangular; disk moderately strongly convex, finely punctate, faintly depressed near base on both sides. Scutellum subcordate, smooth but sparsely scattered with microscopic punctures.

Elytra 1.6 times as long as broad, about twice the length and 1.3 times the breadth of pronotum, broadest at apical 1/3, weakly narrowed to front and roundly narrowed to rear, slightly, roundly produced apically; dorsum strongly convex above, thickest at middle, with surface very weakly microsculptured; disk with rows of small punctures, which are often striated and intermixed with smaller ones and distance between them about 3–5 times their diameter, with 5th row strongly impressed in basal portion; intervals nearly flat, scattered with microscopic punctures which are approximately 1/4 of larger ones (in rows) in size; sides rather abruptly declined and lateral margins rather distinctly sulcate.

Mentum trapezoidal and feebly coriaceous, raised antero-medially; gula parabolic, finely impressed along borders on both sides; terminal segment of maxillary palpus with arcuate outer side about 1.7 times the length of inner or apical.

Prosternum fairly short, finely margined in front, very feebly microreticulate, with intercoxal space fusiformly raised, flattened on surface and rimmed along margin, rather acute at posterior apex (=prosternal process); mesosternum also short, strongly depressed anteriorly, raised somewhat in X-shape posteriorly; metasternum relatively broad, very feebly microreticulate, sparsely scattered with minute punctures, shallowly, obliquely wrinkled antero-laterally, with median impression in posterior 2/3. Abdomen microscopically punctate, very feebly microreticulate in 3 anterior sternites and basal half of 4th, weakly wrinkled in 2 anterior sternites and basal portion of 3rd.

Legs medium-sized, apical half of each tibia rather remarkably haired on inner side, relative length of each tarsal segment of pro-, meso- and metatarsi: 0.9, 0.6, 0.6, 0.5, 1.6; 1.4, 0.7, 0.7, 0.5, 1.8; 2.2, 1.1, 1.0, 2.0.

Body length: 6.2–7.9 mm.

Holotype: ♂, Benakat (natural forest), South Sumatra, Indonesia, 19. III. 1983, H. MAKIHARA leg. Paratypes: 1 ex., nursery site, 10. II.; 2 exs., natural forest, 18. III.; 2 exs., ditto, 19. III.; 2 exs., ditto, 21. III. 1983, H. MAKIHARA leg.

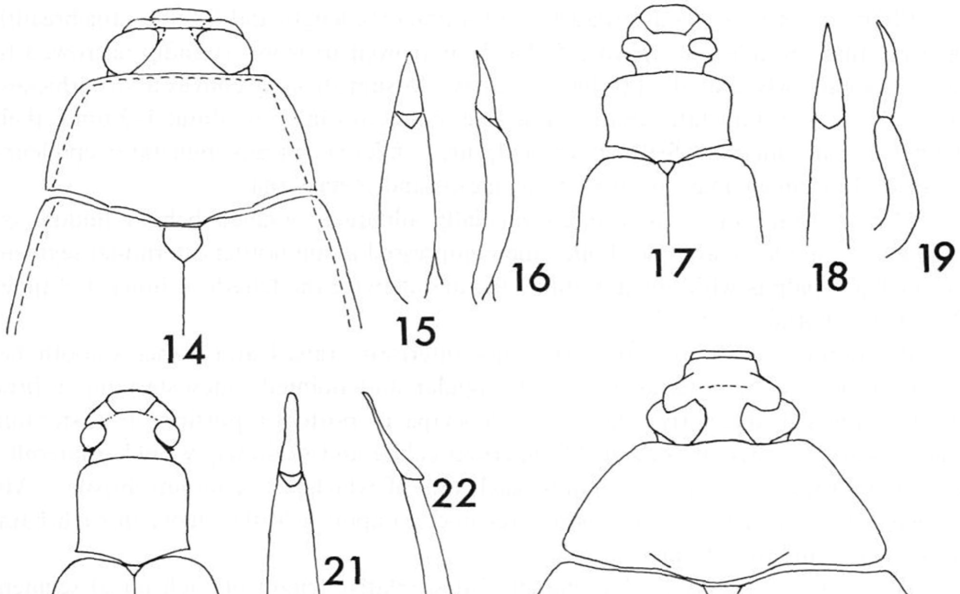
This new species is allied to *Hemicera tsuyukii* MASUMOTO from Formosa, but is distinguishable from the latter by its body being more elongate and more finely punctate above, and punctures in rows on elytra distinctly finer.

Simalura yamatei sp. nov.

Dark reddish brown to blackish brown, with head and pronotum tinged with bluish to purplish color and shining, elytra reddish coppery to greenish brassy and strongly metallically shining, under surface moderately shining. Elongate oval; convex and widened posteriad.

Head transverse-elliptic, moderately convex above, weakly depressed in middle, rather closely and strongly punctate, punctures smaller to apex; fronto-clypeal border nearly straight and impressed, impression obliquely reaching outer margin; clypeus wide, nearly straight and weakly bent downward in front, without membranous area; genae nearly horizontal, with outer margins weakly, obliquely produced; eyes fairly large, convex laterad, distance between them about 1.9 times their transverse diameter; tempora a little narrower than breadth between genae, slightly pointed just behind each eye; antennae medium-sized, reaching basal 1/4 of pronotum, 6 apical segments flattened and noticeably widened, 6th triangular, 7th to 10th nearly trapezoidal, 11th oval, relative length of each segment from basal to apical: 4.0, 1.6, 2.4, 1.8, 2.0, 2.5, 2.7, 2.5, 2.7, 2.6, 4.2.

Pronotum subrectangular, about 1.5 times as broad as long, broadest at anterior 1/3, roundly narrowed to front and gradually narrowed to rear, weakly sinuate before base; front border weakly arcuate forward, finely margined; basal border more strongly arcuate posteriad; sides moderately declined to sulcate lateral margins; front angles rounded; hind angles subrectangular; disk strongly convex anteriorly, moderately closely, finely punctate, with spot-like faint impressions at anterior 1/3 on both sides, transversely depressed in basal 2/7. Scutellum small, triangular with slightly rounded sides, scattered with small (sometimes intermixed with larger) punctures.



Figs. 14–28.——14, *Hemicera tabatai* sp. nov., fore body; 15, ditto, male genitalia (dorsal view); 16, ditto, male genitalia (lateral view); 17, *Simalura yamatei* sp. nov., fore body; 18, ditto, male genitalia (dorsal view); 19, ditto, male genitalia (lateral view); 20, *Thesilea ariharai* sp. nov., fore body; 21, ditto, male genitalia (dorsal view); 22, ditto, male genitalia (lateral view); 23, *Amarygmus katoi* sp. nov., fore body; 24, ditto, male genitalia (dorsal view); 25, ditto, male genitalia (lateral view); 26, *Elixota ohtai* sp. nov., fore body; 27, ditto, male genitalia (dorsal view); 28, ditto, male genitalia (lateral view).

Elytra about 1.6 times as broad as long, 4 times the length and 1.6 times the breadth of pronotum, broadest at apical 2/5, feebly narrowed to front, roundly narrowed to rear, very narrowly, roundly produced at apex; dorsum strongly convex above, thickest at basal 2/5; disk punctate-striate, striae fine, punctures in them about 1–3 times their diameter apart; intervals feebly microsculptured, microscopically punctate; epipleura rimmed along inner margin opposite to meso- and metasterna.

Mentum trapezoid, raised antero-medially, obliquely gouged behind middle on both sides; gula large and parabolic, finely impressed along borders; terminal segment of maxillary palpus with arcuate outer side about twice the length of inner, 0.8 times the length of straight apical.

Prosternum medium-sized, coriaceous anteriorly, raised and rather smooth between coxae, with prosternal process triangular and pointed; mesosternum a little short, depressed anteriorly, elevated in Y-shape in posterior portion; metasternum medium-sized, rather smooth, feebly microreticulate and shallowly wrinkled laterally, scattered with microscopic punctures, each one of which has a minute bristle. Abdomen rather closely punctate, punctures finer to apex, a litttle rugose in each basal portion of 3 anterior sternites.

Legs without any particular characteristics, relative length of each tarsal segment from basal to apical: 2.0, 1.7, 1.5, 1.1. 6.0; 2.5, 1.6, 1.5, 1.3, 6.1; 4.6, 2.4, 1.7, 5.8.

Body length: 5.6–7.3 mm.

Holotype: ♂, Benakat (nursery site), South Sumatra, Indonesia, 18. III. 1983, H. MAKIHARA leg. Paratypes: 1 ex., ditto, 3. III.; 1 ex., ditto, 4. III.; 1 ex., ditto, 5. III.; 1 ex., ditto, 10. III.; 1 ex., ditto, 11. III.; 1 ex., ditto, 13. III.; 2 exs., ditto, 15. III. 1983, H. MAKIHARA leg.

This new species may belong to KULZER's lst group of the genus *Simalura*, but the present one has no special characteristics along the inner margin of each protibia in male.

Thesilea ariharai sp. nov.

Blackish brown, with head, pronotum, scutellum and upper side of each leg except tarsus indigo-bluish, elytra purplish, and underside dark bluish; strongly metallically shining. Elongate; strongly convex longitudinally.

Head rather transverse-octagonal, strongly raised posteriorly, moderately closely punctate, punctures finer to apex; frons a little sparsely punctate, steeply declined to clearly impressed fronto-clypeal border, impression reaching outer margin; clypeus short, feebly convex transversely, truncate in front; genae oblique, raised along outer margins and depressed along fronto-genal border; eyes medium-sized, roundly convex laterad, distance between them about 2.6 times their diameter, with ocular sulci deep; tempora feebly pointed postero-laterad just behind eyes; antennae medium-sized, reaching basal 1/3 of pronotum, 6 apical segments flattened and club-like, 11th ovoid and largest, relative length of each segment from basal to apical: 3.2, 1.7, 2.6, 2.3, 2.2, 2.3, 2.2, 2.5, 2.3, 2.5, 4.1.

Pronotum subquadrate, 1.2 times as broad as long, broadest at anterior 2/5; front border moderately arcuate, not margined; basal border weakly arcuate posteriad and entirely margined; sides gradually declined and lateral margins finely margined, sinuate in basal 2/5; front angles narrowly rounded; hind angles subrectangular; disk rather strongly convex, especially distinct anteriorly, rather closely, finely punctate, each puncture with a very short, microscopic bristle. Scutellum small, triangular, slightly depressed and smooth.

Elytra 1.8 times as long as broad, 3.5 times the length and 1.6 times the breadth of pronotum, broadest at apical 2/7, weakly narrowed to front, roundly so to rear, feebly, roundly produced in apical portion; dorsum rather strongly convex, thickest at basal 2/5, weakly but rather noticeably depressed behind scutellum; disk with rows of punctures, which are often striated, distance between them about 0.8–2.0 times their diameter; intervals nearly flat in inner portion, feebly convex laterally, weakly microreticulate, scattered with fine punctures, each with a very minute bristle (visible under ×20); sides rather steeply declined but sulcated lateral margins are visible from above.

Mentum subcordate, coriaceous, raised antero-medially, upper side straight, basal margin feebly rimmed; gula parabolic, impressed along borders; terminal segment of maxillary palpus with arcuate outer side about 1.8 times the length of inner, nearly of the same length as apical.

Prosternum coarsely, closely punctate, finely margined in front, strongly raised between coxae, with prosternal process subcordate and depressed, blunt at apex; mesosternum depressed and coarsely punctate in anterior half, raised and roughly coriaceous in Y-shape in posterior half, with low prominence at middle; metasternum rather broad, feebly microreticulate, sparsely, finely punctate (each puncture with microscopic bristle), convex in middle, with median impression in posterior 3/5, rather noticeably raised in area between coxae. Abdomen fairly closely, finely punctate, punctures finer to apex, weakly wrinkled in basal half.

Legs without special characteristics, relative length of each tarsal segment from basal to apical: 2.9, 1.8, 1.9, 2.0, 5.9; 2.6, 2.2, 2.1, 2.1, 6.1; 6.0, 3.2, 3.0, 6.1, respectively.

Body length: 8.3–10.5 mm.

Holotype: ♂, Benakat (nursery site), South Sumatra, Indonesia, 22. II. 1983, H. MAKIHARA leg. Paratypes: 1 ex., plantation site, 9. II.; 1 ex., nursery site, 22. II.; 1 ex., ditto, 25. II.; 1 ex., ditto, 27. II.; 1 ex., ditto, 12. III.; 1 ex., ditto (from *Albizia falcata*), 14. III.; 1 ex., ditto, 19. III. 1983, H. MAKIHARA leg.

This new species somewhat resembles *Gauromaia* species, but is easily distinguishable from them by having narrower head and pronotum with the front border not margined.

Amarygmus katoi sp. nov.

This new species is allied to *Amarygmus aeneus* WIEDEMANN, first described from

Java and also found in Sumatra, but is discriminated from the latter by the following characteristics:

Body larger and more convex laterad. Head and pronotum bearing bluish green and elytra brassy green metallic luster.

Head more weakly and sparsely punctate; frons shorter, with fronto-clypeal border impressed and shortly arcuate; clypeus nearly vertical; antennae a little shorter and thicker, relative length of each segment from basal to apical: 1.3, 0.5, 1.3, 1.1, 1.1, 0.9, 0.9, 0.8, 0.8, 0.9, 1.2.

Pronotum more transverse, about twice as broad as long; front border arcuate posteriad, nearly straight in median half.

Elytra a little less than 1.4 times as long as broad, 4 times the length and 1.4 times the breadth of pronotum, broadest at middle and thickest a little before middle; disk punctate-striate, punctures in striae more closely set to each other and 1–2 times their diameter apart; intervals nearly flat, scattered with minute punctures.

Mentum subcordate, raised antero-medially, shortly truncate at hind apex; gula triangular, depressed postero-medially, impressed along borders; terminal segment of maxillary palpus with arcuate side about 1.4 times the length of inner, nearly of the same length as apical.

Prosternum short and coriaceous, margined in front, rather widely raised between coxae and depressed medially, with prosternal process subcordate and rather conspicuous; mesosternum short, strongly depressed in front, hollowed V-shaped in middle, elevated posteriorly; metasternum medium-sized, feebly coriaceous, with median impression in posterior 2/3. Abdomen rather closely punctate, punctures closer and finer to apex, wrinkled in 3 anterior sternites, 1st sternite with crenulate impression along basal border on each side.

Legs comparatively short, relative length of each tarsal segment from basal to apical: 0.7, 0.4, 0.3, 0.3, 1.2; 0.9, 0.5, 0.4, 0.4, 1.4; 2.3, 0.7, 0.5, 1.4, respectively.

Male genitalia slender in basal portion, slightly hooked at apex.

Body length: 8.8–9.6 mm.

Holotype: ♂, Benakat (nursery site), South Sumatra, Indonesia, 23. II. 1983, H. MAKIHARA leg. Paratypes: 9 exs., same data as the holotype.

The holotype specimen was captured on the bark of *Ablizia falcata*.

Elixota ohtai sp. nov.

This new species resembles *Amarygmus sakaii* MASUMOTO from Formosa but is discriminated from the latter by the following characteristics:

Reddish brown to blackish brown with upper surface bearing greenish brassy metallic luster. Oblong oval; strongly convex above.

Head comparatively narrow; eyes invading more deeply into frons, distance between them about a half their diameter; frons depressed anteriorly; genae smaller but more strongly raised along outer margins and narrowly produced; antennae slightly slender, relative length of each segment from basal to apical: 3.9, 1.6, 3.7, 2.9, 3.0, 3.0, 3.0, 3.0, 2.9, 2.7, 3.2.

Pronotum 1.9 times as broad as long, broadest at base, minutely, unevenly punctate; disk often with a pair of spot-like weak impressions near front border, also with short, oblique, sublinear ones at base, and small semicircular one just opposite to scutellum in some individuals.

Elytra 3.8 times as long as broad, about twice the length and 1.3 times the breadth of pronotum, broadest at basal 1/3 and thickest at a little before the broadest part; disk with rows of elongate punctures, which are all finer than in *A. sakaii*, often striated in inner portion; intervals weakly microreticulate, scattered with fine punctures.

Mentum subcordate, raised medially, with lateral margins rimmed; gula triangular, rugose posteriorly, impressed along borders; terminal segment of maxillary palpus large and strongly dilated, with arcuate outer side about 1.6 times the length of rounded inner one, 0.8 times the length of apical.

Prosternum short, rimmed in front, strongly raised between coxae, lightly depressed medially, with prosternal process ligulately protruding in upper part, triangularly so at base; mesosternum also short, strongly depressed in anterior half, deeply hollowed in V-shape in middle, elevated and rugose posteriorly, impressed at base medially; metasternum medium-sized, rather smooth, finely punctate, shallowly wrinkled antero-medially, with median impression in posterior 4/5. Abdomen finely punctate, punctures finer to apex, very shallowly wrinkled in 3 anterior sternites.

Legs comparatively short and stout, with inner margin of mesotibia feebly indented in apical 2/3, relative length of each tarsal segment as follows: 4.0, 2.9, 2.2, 2.0, 7.2; 5.4, 3.5, 3.0, 2.5, 8.0; 14.0, 4.2, 3.4, 8.1, respectively.

Male gentialia slender, with small spatulate apex.

Body length: ca. 9.5 mm.

Holotype: ♂, Benakat (nursery site), South Sumatra, Indonesia, 23. II. 1983, H. Makihara leg. Paratypes: 1 ex., plantation site, 23. II.; 1 ex., nursery site (from *Albizia falcata*), 7. III.; 1 ex., ditto, 12. III. 1983, H. Makihara leg.

The holotype specimen was captured on the bark of *Albizia falcata*.

List of Tenebrionidae from Benakat, South Sumatra

Tribe Heterotarsini

1. *Heterotarsus inflatus* Lacordaire, 1859
   Specimens examined: 8 exs., nursery site and plantation site.

Tribe Opatrini

2. *Gonocephalum adpressiforme* Kaszab, 1951
   Specimens examined: 2 exs., nursery site.

Tribe Bolitophagini

3. *Falsonannocerus makiharai* sp. nov.

4. *Chaetopsia sumatrensis* sp. nov.
5. *Bradymerus clathratus* SCHAUFUSS, 1887
   Specimens examined: 3 exs., nursery site (light trap).
6. *Atasthalus callosus* GEBIEN, 1914
   Specimen examined: 1 ex., nursery site.

Tribe Diaperini

7. *Platydema detersum* (WALKER, 1858)
   Specimen examined: 1 ex., nursery site.
8. *Ischnodactylus* sp.
   Specimen examined: 1 ex., nursery site.
   Though *I. gradatus* GEBIEN is known from Sumatra, this species rather resembles *I. luzonus* GEBIEN. The specimen is a female.
9. *Ceropria induta* (WIEDEMANN, 1819)
   Specimens examined: 2 exs., nursery site (light trap).

Tribe Leiochrini

10. *Leiochrinus rufofulvus* WESTWOOD, 1883
    Specimen examined: 1 ex., plantation site.
11. *Leiochrodes rufofulvus* WESTWOOD, 1883
    Specimens examined: 6 exs., nursery site (from *Ficus* sp.).
12. *Leiochrodes harpagon* KASZAB, 1961
    Specimen examined: 1 ex., nursery site (from *Ficus* sp.).

Tribe Ulomini

13. *Cneocnemis sumatrensis* sp. nov.
14. *Cneocnemis haemorrhoa* (FAIRMAIRE, 1893)
    Specimen examined: 1 ex., nursery site (light trap).
15. *Uloma javana* GEBIEN, 1912
    Specimens examined: 2 exs., nursery site.
16. *Uloma contracta* FAIRMAIRE, 1882
    Specimen examined: 1 ex., nursery site (light trap).
17. *Uloma* sp.
    Specimens examined: 2 exs., nursery site.
    Resembles *U. rufilabris* FAIRMAIRE, 1882.
18. *Eutochia lateralis* (BOHEMAN, 1858)
    Specimens examined: 2 exs., nursery site.

Tribe Tenebrionini

19. *Encyalesthus aeruginosus* (FABRICIUS, 1787)
    Specimens examined: 2 exs., nursery site (on the bark of *Albiza falcata*).
20. *Encyalesthus* sp.
    Specimen examined: 1 ex. (♀), natural forest.
    Resembles *E. exularis* GEBIEN, 1913.

21. *Cryphaeus gazella* (Fabricius, 1798)
Specimens examined: 2 exs. (♂♀), nursery site.

Tribe Lupropini

22. *Luprops tebingensis* Kaszab, 1939
Specimens examined: 3 exs., nursery site.
23. *Luprops* sp.
Specimens examined: 10 exs., nursery site.
24. *Xanthalia* sp.
Specimen examined: 1 ex., nursery site.

Tribe Cnodalonini

25. *Tetraphyllus corruscus* Fairmaire, 1882
Specimen examined: 1 ex., nursery site.
26. *Tetraphyllus politus* Kaszab, 1944
Specimen examined: 1 ex., nursery site.
27. *Tetraphyllus marginicollis* Fairmaire, 1893
Specimens examined: 2 exs., nursery site (light trap).
28. *Tetraphyllus cyaneicollis* Fairmaire, 1893
Specimen examined: 1 ex., nursery site.
29. *Artactes nigritarsis* Pascoe, 1868
Specimens examined: 2 exs., plantation site and nursery site (from *Albizia falcata*).
30. *Hemicera splendens* (Wiedemann, 1823)
Specimens examined: 31 exs., nursery site, same (from *Albizia falcata*), plantation site and natural forest.
31. *Hemicera* sp.
Specimen examined: 1 ex., natural forest.
Resembles *H. splendens*.
32. *Hemicera* sp.
Specimen examined: 1 ex., nursery site.
Resembles *H. splendens*.
33. *Hemicera femoralis* Pic, 1921
Specimens examined: 5 exs., nursery site and same (from *Albizia falcata*).
34. *Hemicera* sp.
Specimen examined: 1 ex., nursery site.
Resembles *H. fukiensis* Kaszab, 1954.
35. *Hemicera multicolor* Fairmaire, 1893
Specimens examined: 5 exs., nursery site (on the bark of *Albizia falcata*).
36. *Hemicera compacta* Fairmaire, 1882
Specimens examined: 8 exs., nursery site.
37. *Hemicera empatanda* sp. nov.
38. *Hemicera tabatai* sp. nov.
39. *Hemicera* sp.

Specimens examined: 2 exs., nursery site.
Resembles *A. brendelli* Kaszab, 1980.

76. *Amarygmus* sp.
Specimen examined: 1 ex., nursery site.
Resembles *A. lucens* Kaszab, 1980.

77. *Amarygmus* sp.
Specimens examined: 3 exs., nursery site.
Resembles *A. sericeus* Gebien, 1927.

78. *Amarygmus* sp.
Specimen examined: 1 ex., nursery site.
Belongs to "*Pseudamarygmus*" (sensu Pic).

Tribe Strongyliini

79. *Strongylium subimpressum* Fairmaire, 1903
Specimen examined: 1 ex., nursery site.

80. *Strongylium* sp.
Specimen examined: 1 ex., nursery site.
Resembles *S. varians* Pascoe, 1883.

81. *Strongylium* sp.
Specimen examined: 1 ex., nursery site.
Resembles *S. binhense* Pic, 1922.

摘要

槇原 寛氏が，南スマトラのブナカで，1983年に採集されたゴミムシダマシ類の新種9種を記載し，採集された全種をリストにした．

Elytra, Tokyo, **13** (1): 19–47. August 10, 1985

The Buprestid Beetles of the Subfamily Agrilinae from Japan (Coleoptera, Buprestidae)

Masao TÔYAMA

4–16, Koshien 6, Nishinomiya, Hyogo 663, Japan

Abstract A new species of the genus *Toxoscelus*, and fifteen new species and four subspecies of the genus *Agrilus* are described from Japan, and a species of the genus *Agrilus* is newly recorded. A new species of the genus *Agrilus* from Taiwan is also described.

The buprestid beetles belonging to the subfamily Agrilinae occurring in Japan have been studied by some previous authors. Although a number of species of this subfamily have already been recorded and described from this country, there are still many others that await descriptions.

Recently, I had opportunities to examine many Japanese species belonging to this subfamily. After a careful examination, it becomes apparent that more than fifty species must be newly described or recorded from Japan.

In this paper, seventeen new species and four new subspecies will be described, and a species will be newly recorded from Japan. All the holotypes designated in this paper are deposited in the National Science Museum (Nat. Hist.), Tokyo.

Before going further, I wish to express my sincere gratitude to Dr. Yoshihiko KUROSAWA of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance, and to Dr. Shun-Ichi UÉNO of the same museum for his critical reading the original manuscript. I am also indebted to Drs. Sadahiro OHMOMO and Keisuke TSUJI, and Mrssrs. Kôyô AKIYAMA, Kanoh DEGUCHI, Ken-Ichi EMOTO, Hiroshi FUJITA, Takeichiro HATAYAMA, Shoichi IMASAKA, Nobuyuki KOBAYASHI, Isao MATOBA, Akira NISHIYAMA, Koichi SUGINO, Yoshimasa SHIOZAKI, Minoru TAO, Ryoji TOYOSHIMA and Masamichi YAGI for their kind offers of the materials.

Toxoscelus matobai sp. nov.

(Fig. 18)

Body small, rather robust, somewhat deplanate above; above black with aeneous tinge; beneath black with slight violaceous tinge; antennae and legs concolorous with body beneath.

Head small, with the median groove deep and running from vertex to the centre of frons; vertex feebly gibbose on each side of median groove, longitudinally rugoso-punctate; frons slightly convex, transversely rugoso-punctate; eyes distinctly converging below in frontal aspect, with the inferior rims arcuately emarginate; clypeal suture inconspicuous; clypeus strongly narrowed by antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large, with the posterior margins strongly carinate; antennae short and compact, eleven-segmented, serrate from the fifth segment, with the first segment stout, subglobular, about 1.5 times as long as the second, which is equally stout and subglobular to the first, the third and fourth about equal in length and shape.

Pronotum transverse, about 1.4 times as wide as long, widest just before the middle; sides arcuately expanded in dorsal aspect, slightly but distinctly bisinuate in lateral aspect, very finely and inconspicuously crenulate; anterior margin bisinuate, with the median lobe broadly and arcuately produced; posterior margin strongly and angulately emarginate just before the elytral lobes, slightly and arcuately emarginate just before scutellum; anterior angles acute and produced in dorsal aspect, abased at the tips in lateral aspect; posterior angles obtuse and rounded; marginal carinae entire; disc uneven, with a small transverse depression behind the anterior lobe, another small shallow one just before scutellum, large and transverse lateral ones behind the middle; surface rugoso-punctate. Scutellum subtriangular, very finely rugose, with the anterior margin arcuately but slightly produced.

Elytra broader than pronotum, about 2.2 times as long as wide, about 3.7 times as long as pronotum, widest just behind the middle; sides rounded at humeri, slightly expanded behind them, slightly convergent to anterior third, expanded and swollen near the middle, then obliquely convergent to the tips, which are separately and narrowly rounded; basal margins sinuate, with the lobes subtriangularly produced; sutural margin slightly elevated in posterior two-thirds; lateral margins unarmed; disc convex, rather profoundly depressed along the basal margins, longitudinally deplanate along the suture in anterior half; surface evenly but inconspicuously imbricato-punctate, clothed with fine, recumbent, blackish hairs, ornamented with semirecumbent cinereous hairs arranged on each elytron as follows: a round marking just behind the basal depression; a round marking along the suture at the anterior fourth; a zigzag band just behind the middle; a wavy band at the apical fourth.

Prosternum transversely depressed along the anterior margin, which is bilobed; prosternal process flattened, gradually narrowed to just behind anterior coxal cavities, then strongly attenuate to the pointed tip. Abdomen beneath with anal segment broadly rounded at the tip. Legs short and robust; anterior tibiae curved; middle tibiae strongly curved; posterior tibiae rather straight, with the inferior ridge sinuate.

Length: 4.8–5.7 mm; width: 1.3–2.0 mm.

Holotype: ♂, Mt. Gomadan, Wakayama Pref., 27. VII. 1982, I. Matoba lgt. Allotype: ♀, Mt. Kenashi, Okayama Pref., 9. VII. 1983, O. Yamaji lgt.

Remarks: This new species is allied to *T. yakushimensis* Y. Kurosawa, 1957, but can be easily distinguished from it by the following characteristics: 1) body rather slender, instead of being robust; 2) transverse bands on elytra slightly waved, while in *T. yakushimensis*, they are strongly waved.

Agrilus hirashimai Y. KUROSAWA, 1964

Agrilus hirashimai Y. KUROSAWA, 1964, Kontyû, Tokyo, **32**: 329–331.
Agrilus hirashimai: Y. KUROSAWA, 1974, Coleopt. News, (21/22): 2.

Specimen examined: 1 ♂, Ie, Okinawa Is., 15. V. 1981, R. TOYOSHIMA lgt. (New to Okinawa Is.)

Host plant: *Castanopsis* sp. (confirmed by R. TOYOSHIMA).

Distribution: Amami-Oshima Is., Okinawa Is.

Agrilus hirashimai yaeyamaensis subsp. nov.

(Fig. 19)

Differs from the nominotypical race in the following points: 1) Body above black with aeneous tinge, while in ssp. *hirashimai*, it is entirely black without aeneous tinge; 2) elytra evenly covered with cinereous hairs, while in ssp. *hirashimai*, they are clothed with cinereous hairs only in posterior half.

Holotype: ♂, Mt. Omotodake, Ishigaki Is., 14. IV. 1973, H. IRIE lgt. Allotype: ♀, Mt. Omotodake, Ishigaki Is., 17. IV. 1973, H. IRIE lgt. Paratypes: 1 ♂, Mt. Bannadake, Ishigaki Is., 21. IV. 1965, H. YOKOYAMA lgt.; 1 ♂, Mt. Omotodake, Ishigaki Is., 10. IV. 1974, M. FUKAMACHI lgt.; 1 ♀, Mt. Bannadake, Ishigaki Is., 12. IV. 1976, N. NISHIKAWA lgt.

Distribution: Ishigakijima Is.

Agrilus mendax sachalinensis OBENBERGER, 1935

Agrilus sachalinensis OBENBERGER, 1935, Čas. Čs. Spol. ent., **32**: 165.
Agrilus mendax sachalinensis: Y. KUROSAWA, 1974, Coleopt. News, (23/24): 3.

Specimen examined: 1 ♀, Rusha River, Shiretoko, Hokkaido, 18–19. VII. 1965, T. NAKAMURA lgt. (New to the fauna of Japan.)

Agrilus suginoi sp. nov.

(Figs. 1, 20)

Body subcylindrical; above entirely dark blue; beneath blackish blue, less shining than above; antennae and legs concolorous with body beneath.

Head arcuately produced in dorsal aspect; vertex longitudinally and very obsoletely impressed at the middle, longitudinally rugoso-punctate; frons convex, transversely rugoso-punctate, clothed with semirecumbent, short, cinereous hairs, without median groove; eyes large, subparallel in frontal aspect, with the inferior rims distinctly sinuate; clypeal suture transverse, almost straight; clypeus slightly broader than long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large, with the posterior margins carinate, and small and transverse pores just above the cavities; antennae rather compact, eleven-segmented, serrate from the fourth segment, with the first segment stout, about 1.3 times as long as the second, which is stout and subglobular, the third shorter than the second, the fourth subtriangular, slightly shorter than the third.

Pronotum transverse, about 1.4 times as wide as long, widest behind anterior angles; sides slightly sinuate, roundly expanded behind anterior angles, then sinuously convergent to posterior angles; anterior margin bisinuate, with the median lobe arcuately produced; posterior margin trisinuate, with the median lobe obsoletely emarginate before scutellum; anterior angles acute and produced in dorsal aspect, acute and abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae arcuate, extending to posterior half, not conjoined with marginal carinae; marginal carinae sinuate, sharply defined; submarginal carinae subparallel to marginal ones in anterior fourth, then gradually approximate to the latter, and conjoined with them just before posterior angles; disc convex, with a small and shallow median depression just before scutellum, and lateral depressions along prehumeral carinae; surface transversely rugoso-punctate. Scutellum with a transverse carina, the area before the carina distinctly declivous in front, median projection sharply produced posteriorly.

Elytra about 2.7 times as long as wide, about 3.7 times as long as pronotum, and widest at the posterior two-fifths; sides obtuse at humeri, slightly sinuate from the base to behind the middle, where they are arcuately rounded, then convergent to the tips, which are separately rounded and very finely denticulate; basal margins carinate, with the lobes arcuately produced at the middle; sutural margin slightly elevated in posterior seven-tenths; lateral margins unarmed except for the part near apices, where they are very finely denticulate; humeri not prominent, without humeral carinae; disc longitudinally depressed just behind scutellum for a short distance, broadly depressed behind the elytral lobes; surface obsoletely rugoso-punctate, covered with semirecumbent, inconspicuous, short, dark hairs.

Body beneath evenly clothed with fine cinereous hairs. Prosternum convex; gular lobe with the anterior margin very obsoletely emarginate at the middle; prosternal process subparallel between anterior coxal cavities, then attenuate to the apex. Abdomen beneath with the last ventral segment rounded at the apex. Pygidium without median carina, and rounded at the apex. Posterior tarsi distinctly shorter than posterior tibiae; the first segment slightly shorter than the following three united. Claws simply cleft.

Length: 4.8–6.5 mm; width: 1.0–1.2 mm.

Holotype: ♀, Kanpira, Iriomote Is., 10. V. 1973 (host out), K. SUGINO lgt. Paratype: 1 ♀, same data as holotype.

Remarks: This new species is closely allied to *A. rotundicollis* E. SAUNDERS, 1873, from Siberia, N. China, Korea and Japan, but can be distinguished from it by the following characteristics: 1) frons narrower; 2) eyes subparallel in frontal aspect, while in *A. rotundicollis*, they are distinctly convergent below; 3) pronotum slenderer.

Agrilus imasakai sp. nov.

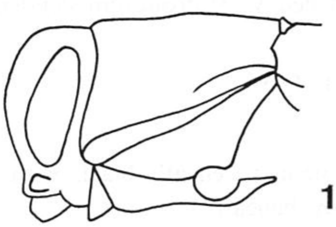
(Figs. 2, 21)

Body moderate, rather robust; above aeneous; beneath black with aeneous tinge; antennae and legs concolorous with body beneath.

Head slightly narrower than the base of pronotum; vertex transversely rugoso-punctate, with a median impression shallow and distinct; frons broader than long, about 1.2 times as wide as long between eyes, distinctly impressed medially below vertex, slightly depressed just above clypeus, transversely grooved along the posterior margins of antennal cavities, transversely rugoso-punctate, and clothed with semirecumbent, inconspicuous, short, cinereous hairs; eyes not so large, slightly converging below in forntal aspect, with the inferior rims almost straight; clypeal suture transverse; clypeus transverse, about 1.4 times as wide as long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large; antennae rather lax, eleven-segmented, serrate from the fourth segment, with the first segment stout, slightly longer than the second, which is equally stout to the first, and about 1.3 times as long as the third, the third shortest, the fourth subtriangular.

Pronotum transverse, about 1.6 times as wide as long, widest at the middle; sides slightly sinuate; anterior margin bisinuate, with the median lobe broadly produced; posterior margin slightly narrower than the anterior, trisinuate, with the median lobe arcuately emarginate before scutellum; anterior angles acute and sharply produced in dorsal aspect, sharply abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae arcuate and feeble, extending to the middle, and not conjoined with marginal ones; marginal carinae slightly sinuate; submarginal carinae extending to anterior two-thirds, moderately distant from marginal carinae in anterior half, then approximate to them posteriorly; disc convex, transversely depressed in posterior third; surface transversely rugoso-punctate, evenly clothed with inconspicuous, cinereous hairs. Scutellum with a V-shaped carina, the part before the carina subhexagonal, median projection sharply produced posteriorly.

Elytra about 2.7 times as long as wide, about 4.1 times as long as pronotum, and widest just behind the middle; sides rounded at humeri, slightly convergent to anterior third, expanded and swollen near the middle, then convergent to the tips, which are separately subtruncate and very obsoletely dentate; basal margins carinate, with the lobes subtriangularly produced at the middle; sutural margin slightly elevated in posterior two-thirds; lateral margins unarmed except for the apical parts, where they are obsoletely and finely dentate; humeri slightly prominent, without humeral carinae; disc with the basal depressions large though ill-defined posteriorly; surface evenly and densely rugoso-punctate, evenly clothed with semirecumbent, short, cinereous hairs except for the part just behind the middle, where they are clothed with inconspicuous dark hairs.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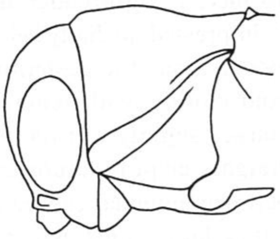
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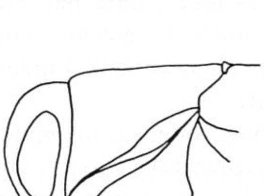
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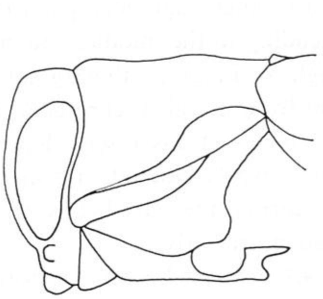
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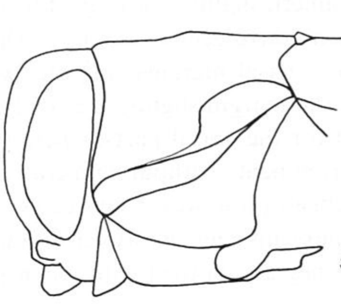
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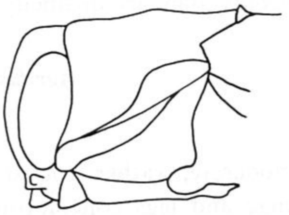
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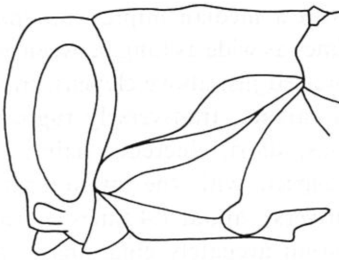
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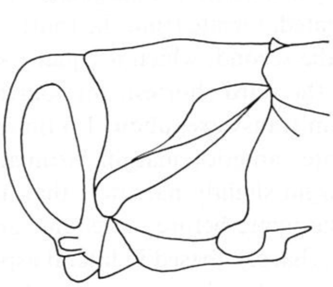
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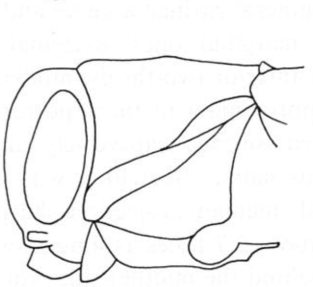
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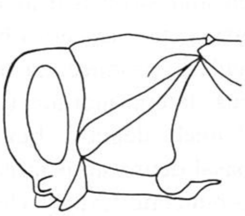
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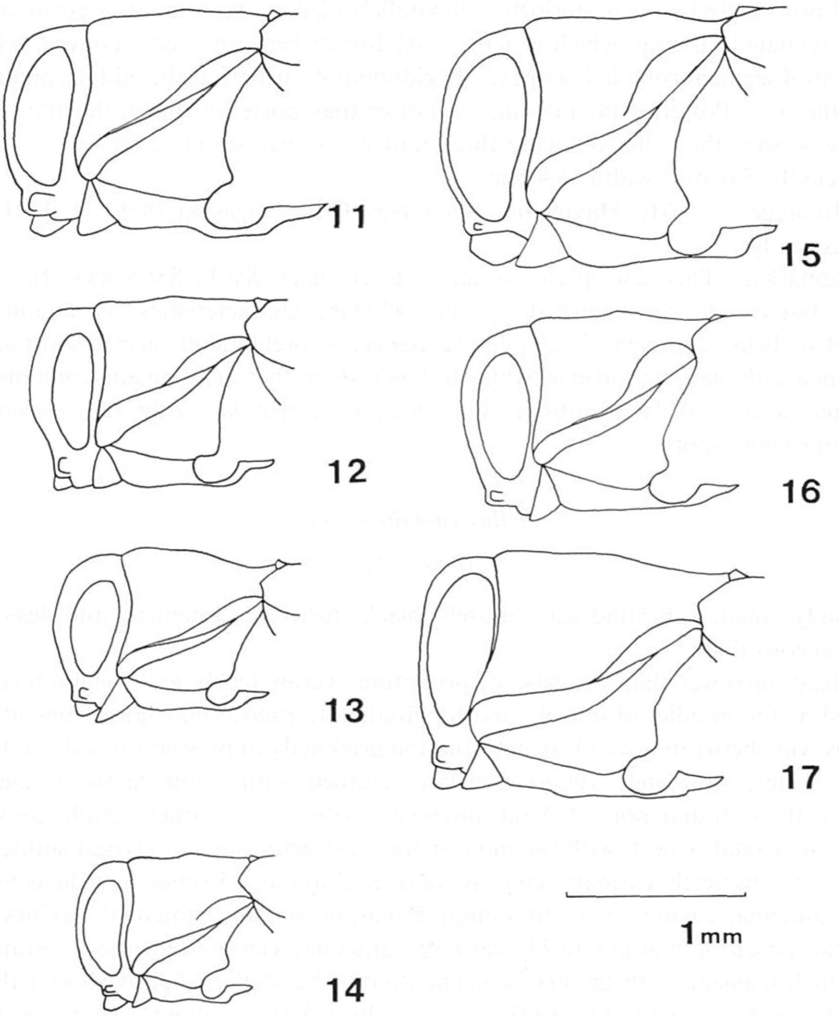


Figs. 1–17. *Agrilus* spp., head and thorax in lateral aspect.——1, *A. suginoi* sp. nov.; 2, *A. imasakai* sp. nov.; 3, *A. yamajii* sp. nov.; 4, *A. nakanei* Y. KUROSAWA; 5, *A. euonymi* sp. nov.; 6, *A. yagii* sp. nov.; 7, *A. nishiyamai* sp. nov.; 8, *A. ohmomoi* sp. nov.; 9, *A. yakushimensis* sp. nov.; 10, *A. watanabei* sp. nov.; 11, *A. deguchii* sp. nov.; 12, *A. yonahaensis* sp. nov.; 13, *A. samuelsoni* sp. nov.; 14, *A. iriei* sp. nov.; 15, *A. aritai* sp. nov.; 16, *A. semivittatus* sp. nov.; 17, *A. hokkaidoensis* sp. nov.

Body beneath sparsely clothed with short, recumbent, cinereous hairs. Prosternum convex; gular lobe bilobed, with the anterior margin arcuately emarginate; prosternal process declivous posteriorly, subparallel-sided between anterior coxal cavities, then attenuate to the tip, which is acute. Abdomen beneath evenly convex, with the last ventral segment rounded at apex. Pygidium not carinate at the middle, and rounded at the tip. Posterior tarsi distinctly shorter than posterior tibiae; the first segment slightly shorter than the following three united. Claws simply cleft.

Length: 5.6 mm; width: 1.4 mm.

Holotype: ♀, Mt. Mayuyama, Shimabara City, Nagasaki Pref., 16. VIII. 1975, S. Imasaka lgt.

Remarks: This new species is allied to *A. maculifer* E. Saunders, 1873, from Japan, but can be distinguished by the following characteristics: 1) antennae lax, instead of being compact; 2) clypeus narrower; 3) prehumeral carinae short and not conjoined with marginal carinae, while in *A. maculifer*, they are long and conjoined with marginal carinae; 4) elytra without white spots, while in *A. maculifer*, they are provided with four white spots.

Agrilus yamajii sp. nov.

(Figs. 3, 22)

Body small, subcylindrical, entirely black, lustrous; antennae and legs black with aeneous tinge.

Head narrower than the base of pronotum; vertex feebly and longitudinally impressed at the middle, obsoletely and longitudinally rugoso-punctate; frons about as long as wide between eyes, obsoletely and longitudinally impressed for a short distance below vertex, obsoletely rugoso-punctate, clothed with semirecumbent, cinereous hairs, with profound pores behind antennal cavities; eyes rather small, converging below in frontal aspect, with the inferior rims distinctly sinuate; clypeal suture transverse, very obsoletely carinate; clypeus transverse, about 1.3 times as wide as long between antennal cavities, with the anterior margin sinuate; antennal cavities large, with the posterior margins feebly carinate; antennae eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, slightly shorter than the second, which is equally stout to the first, the third shortest, about 0.8 times as long as the second, the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.4 times as wide as long, widest at the middle; sides subparallel in anterior half, then sinuously convergent to posterior angles; anterior margin bisinuate, with the median lobe arcuately but feebly produced; posterior margin trisinuate, with the median lobe arcuately emarginate before scutellum; anterior angles acute and produced in dorsal aspect, abased and pointed in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae sinuate, extending to behind anterior angles, where they are conjoined with marginal carinae; marginal carinae slightly sinuate, but they are distinctly, arcuately abased just behind anterior angles; submarginal carinae subparallel to marginal carinae in anterior two-fifths, then approximate to them, and conjoined with them before posterior angles; disc convex, longitudinally depressed along prehumeral carinae, with two median depressions, which are situated behind the anterior lobe and just before scutellum; surface transversely rugoso-punctate, sparsely clothed with inconspicuous, cinereous hairs along prehumeral carinae. Scutellum with a transverse carina, the part before the carina subpentagonal, median projection sharply produced posteriorly.

Elytra about 2.6 times as long as wide, about 4.8 times as long as pronotum, and widest just behind the middle; sides rounded at humeri, slightly convergent to anterior three-tenths, expanded and swollen near the middle, then convergent to the tips, which are separately rounded and inconspicuously dentate; basal margins sinuate, with the lobes subtriangularly produced at the middle; sutural margin slightly elevated in posterior two-thirds; lateral margins unarmed; humeri slightly prominent, without humeral carinae; disc with large basal depressions; surface evenly and densely rugoso-punctate, evenly and sparsely covered with inconspicuous, short, blackish hairs.

Body beneath evenly and sparsely clothed with short, fine, cinereous hairs. Prosternum convex; gular lobe bilobed, with the anterior margin arcuately and rather strongly emarginate at the middle; prosternal process distinctly constricted between anterior coxal cavities, broadly tricuspidate at the apex, with the lateral projections produced latero-posteriorly. Abdomen beneath with the first visible ventral segment rather deplanate at the middle, and with the last ventral segment rounded at the apex. Pygidium neither carinate nor pointed at the tip. Posterior tarsi shorter than posterior tibiae, with the first segment slightly shorter than the following three united. Claws simply cleft.

Length: 4.2–4.6 mm; width: 0.9–1.0 mm.

Host plant: *Celtis jessoensis* KOIDZ. (confirmed by O. YAMAJI).

Holotype: ♂, Mt. Takahachi, Tottori Pref., 10. V. 1979 (host out), O. YAMAJI lgt. Allotype: ♀, same data as holotype. Paratypes: 2 ♂♂, 1 ♀, same data as holotype.

Remarks: This new species is closely allied to *A. ronino* OBENBERGER, 1935, from Japan, but can be distinguished by the following characteristics: 1) body smaller; 2) body above entirely black, while in *A. ronino*, it is black with distinctly greenish tinge; 3) pronotum widest just behind anterior angles, while in *A. ronino*, it is widest just benind the middle; 4) prosternal process tricuspidate, instead of monocuspidate.

Agrilus nakanei Y. KUROSAWA, 1963

(Figs. 4, 23)

Agrilus acastus nakanei Y. KUROSAWA, 1963, Bull. natn. Sci. Mus., Tokyo, **6**: 106.
Agrilus nakanei: Y. KUROSAWA, 1974, Coleopt. News, (23/24): 3–4.

Specimens examined: 1 ♂, Mt. Odai, 23. VII. 1953, T. NAKANE lgt. (holotype); 1 ♀, Tokyo, 2. VII. 1949, A. YOSHIDA lgt. (paratype); 1 ♀, Mt. Kunimi, Imari

City, Saga Pref., 25. VI. 1978, S. Imasaka lgt.; 1 ♂, Jinmuji, Kanagawa Pref., 8. VII. 1979, K. Shiozaki lgt.; 1 ♀, Koganesawa, Yamanashi Pref., 3. VIII. 1979, S. Ohmomo lgt.; 1 ♀, Akasai, Hyôgo Pref., 26. VII. 1982, M. Yagi lgt.

Remarks: Recently I had an opportunity to examine the type series of *A. nakanei* Y. Kurosawa. After my close examination, it became apparent that two different species were included in this series. One of them, which is rather common in Tokyo, is new to science. I will describe it below.

Agrilus euonymi sp. nov.

(Figs. 5, 24)

Body small but robust; pronotum black with greenish tinge; elytra dark brassy green in anterior half, and black with slight aeneous tinge in posterior half; body beneath black with slight greenish tinge; antennae and legs concolorous with body beneath.

Head slightly narrower than the base of pronotum; vertex longitudinally and obsoletely rugoso-punctate, with the median impression obsoletely impressed; frons distinctly longer than wide between eyes, with a median groove strongly concave below vertex; eyes large, slightly converging below in frontal aspect, with the inferior rims distinctly sinuate; clypeal suture transversely carinate; clypeus slightly broader between antennal cavities, with the anterior margin distinctly emarginate at middle; antennal cavities large, with the posterior margins carinate, the pores just above posterior carinae transverse, small and profound; antennae eleven-segmented, serrate from the fourth segment, with the first segment stoutest, subglobular, slightly longer than the second, which is equally stout to the first, the third less stout, shorter than the second, the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.5 times as wide as long, widest just behind the middle; sides evenly arcuate; anterior margin bisinuate, with the median lobe arcuately produced at the middle; posterior margin trisinuate, with the median lobe arcuately emarginate before scutellum; anterior angles acute and produced in dorsal aspect, acute and abased in lateral aspect; posterior angles obtuse in dorsal aspect; prehumeral carinae strongly sinuate, arcuately rounded in posterior half, very strongly sinuate near the middle, then almost straight and closely approximate to marginal carinae anteriorly; marginal carinae slightly sinuate; submarginal carinae subparallel and moderately distant from marginal ones in anterior half, then gradually approximate to them, and connected with them at the posterior fifth; disc convex, transversely but obsoletely depressed behind the median lobe of anterior margin, obsoletely and longitudinally depressed along prehumeral carinae; surface transversely rugoso-punctate. Scutellum transversely carinate; the part before the carina strongly declivous in front, subquadrate; the part behind the carina with the median projection triangularly produced.

Elytra about 2.9 times as long as wide, about 4.0 times as long as pronotum, and widest just behind the humeri; sides rounded at humeri, slightly convergent to the anterior two-fifths, expanded and swollen near the middle, then convergent to the tips, which are conjoined and slightly produced at the sutural parts, and finely dentate; basal margins arcuately carinate, with the lobes subtriangularly produced at the middle; sutural margin slightly elevated in posterior two-fifths; lateral margins unarmed except for the parts near apices, where they are finely dentate; humeri without humeral carinae; disc strongly depressed behind the basal margin, longitudinally deplanate along suture; surface evenly and densely imbricato-punctate, evenly covered with semirecumbent, dark cinereous hairs in anterior half except for the sides, transversely ornamented with whitish hairs behind the middle, and also covered with dark cinereous hairs in apical parts.

Body beneath clothed with short, fine, cinereous hairs. Prosternum convex, obsoletely rugoso-punctate; gular lobe bilobed, with the anterior margin arcuately and distinctly emarginate at the middle; prosternal process distinctly constricted between anterior coxal cavities, broadly tricuspidate at the apex, with the lateral projections rounded at the tips. Abdomen beneath with the last ventral segment broadly rounded at the apex. Pygidium distinctly carinate at the middle, and rounded at the apex. Posterior tarsi shorter than posterior tibiae, with the first segment about as long as the following three united. Claws simply cleft.

Length: 4.8–6.8 mm; width: 1.3–1.8 mm.

Host plant: *Euonymus japonicus* THUNBERG (confirmed by H. ISHIZUKA and Y. KUROSAWA); *Prunus yedoensis* MATSUM. (confirmed by N. KOBAYASHI).

Holotype: ♂, Kinuta, Setagaya, Tokyo, 18. VI. 1978, Y. KUROSAWA lgt. Allotype: ♀, same data as holotype. Paratypes: 1 ♀, Inogashira, Tokyo, 8. VII. 1954, S. HIRAYAMA lgt. (paratype of *Agrilus acastus nakanei* Y. KUROSAWA, 1963); 1 ♂, Morioka, Iwate Pref., 18. VII. 1958, Y. HIRANO lgt.; 1 ♂, 1 ♀, Suginami, Tokyo, 9. VI. 1965, M. KAWAKAMI lgt.; 2 ♂♂, 2 ♀♀, Shinjuku, Tokyo, 8. VI. 1967, K. TSUJI lgt.; 1 ♀, Shinjuku, Tokyo, 21. VI. 1968, K. TSUJI lgt.; 1 ♂, Shinjuku, Tokyo, 22. VI. 1968, K. TSUJI lgt.; 1 ♂, Shakujii, Tokyo, 31. V. 1968, H. KOBAYASHI lgt.; 2 ♂♂, Shinjuku, Tokyo, 12. VI. 1969, K. TSUJI lgt.; 1 ♂, Kinuta, Setagaya, Tokyo, 28. VI. 1970, Y. KUROSAWA lgt.; 34 ♂♂, 2 ♀♀, Kinuta, Setagaya, Tokyo, 2. VI. 1974, Y. KUROSAWA lgt.; 1 ♂, 1 ♀, Otsuka, Bunkyo, Tokyo, 14. VI. 1977, S. OHMOMO lgt.; 20 ♂♂, 2 ♀♀, Kinuta, Setagaya, Tokyo, 11. VI. 1978, Y. KUROSAWA lgt.; 13 ♂♂, 3 ♀♀, same data as holotype; 1 ♂, Nishi-Agano, Saitama Pref., 18. VI. 1978, K. EMOTO lgt.

Remarks: This new species is closely allied to *A. nakanei* Y. KUROSAWA, 1963, but can be distinguished by the following characteristics: 1) body robuster; 2) prehumeral carinae more strongly sinuate; 3) elytra bicolorous, while in *A. nakanei*, they are unicolorous; 4) elytra each with a transverse band ornamented with whitish hairs, while in *A. nakanei*, they do not bear any whitish bands.

I also examined the following specimens collected in Kyushu. There are small variations between these and the nominotypical race.

1 ♀, Mt. Fukuchiyama, Fukuoka Pref., 16. VII. 1949, Y. YAMAWAKI lgt. (paratype of *Agrilus acastus nakanei* Y. KUROSAWA, 1963); 2 ♂♂, 1 ♀♀, Okinoshima Is., Fukuoka Pref., 28. VII. 1962, M. SHIGA lgt.

Agrilus yagii sp. nov.

(Figs. 6, 25)

Similar to *A. euonymi* sp. nov., but differing from it in the following characteristics: 1) body smaller; 2) prehumeral carinae sinuate, arcuately rounded in posterior two-thirds, then very closely approximate to the marginal ones, while in *A. euonymi*, they are more strongly sinuate; 3) elytra conjointly subtruncate at the tips, while in *A. euonymi*, they are conjoined and slightly produced at the sutural parts; 4) gular lobe with the anterior margin very obsoletely emarginate at the middle, while in *A. euonymi*, it is distinctly and roundly emarginate at the middle.

Length: 4.1 mm; width: 1.0–1.2 mm.

Host plant: Unknown.

Holotype: ♀, Mt. Takahachi, Tottori Pref., 15. VII. 1979, M. TÔYAMA lgt. (on dead branch of *Quercus mongolica* FISCH. var. *grosseserrata* RAHD. et WILS.). Allotype: ♂, Mt. Kurodake, Oita Pref., 28. VII. 1980, S. IMASAKA lgt.

Remarks: The allotype is somewhat damaged.

Agrilus nishiyamai sp. nov.

(Figs. 7, 26)

Similar to *A. euonymi* sp. nov., but differing from it in the following characteristics: 1) prehumeral carinae subtriangularly arcuate in posterior two-thirds, while in *A. euonymi*, they are roundly arcuate in posterior half; 2) pubescence on elytra unicolorous, while in *A. euonymi*, it is bicolorous; 3) elytra separately rounded at the tips, while in *A. euonymi*, they are conjoined and produced at the sutural parts; 4) gular lobe with the anterior margin subtruncate at the middle, while in *A. euonymi*, it is roundly emarginate at the middle.

Length: 5.6 mm; width: 1.2–1.4 mm.

Host plant: Unknown.

Holotype: ♀, Pilu, Hualien Hsien, Taiwan, 31. V. 1980, A. NISHIYAMA lgt. Paratype: 1 ♀, same data as holotype.

Remarks: This new species is also allied to *A. acastus* KERREMANS, 1912, from Taiwan and Japan (Tsushima Is.), but can be distinguished from it by the following charateristics: 1) body larger; 2) pubescence on elytra unicolorous, while in *A. acastus*, it is bicolorous.

Agrilus uenoi Y. KUROSAWA, 1963

Agrilus uenoi Y. KUROSAWA, 1963, Bull. natn. Sci. Mus., Tokyo, **6**: 102–103.
Agrilus uenoi: Y. KUROSAWA, 1975, Coleopt. News, (27/28): 2–3.

Specimens examined: 1 ♂, Mt. Inutabu, Tokunoshima Is., 28. V. 1972 (host out), M. TAKAKUWA lgt.; 1 ♂, 1 ♀, Yona, Okinawa Is., 19. X. 1963, S. MIYAMOTO lgt.; 1 ♀, Yona, Okinawa Is., 19. X. 1963, Y. HIRASHIMA lgt.; 1 ♀, Mt. Minami-meijiyama, Okinawa Is., 20. X. 1963, K. MORIMOTO lgt.; 1 ♀, Oku, Okinawa Is., 30. IV. 1979, K. DEGUCHI lgt.; 1 ♀, Mt. Omotodake, Ishigaki Is., 12–16. VI. 1976, T. KOBAYASHI lgt.; 1 ♀, Mt. Omotodake, Ishigaki Is., 6. VII. 1975, T. TAKAHASHI lgt.; 1 ♂, Tonogusuku, Ishigaki City, Ishigakijima Is., 1. V. 1984, K. IHA lgt.; 1 ♂, Sonai, Iriomotejima Is., 2. IV. 1972, K. MATSUDA lgt.; 1 ♀, Iriomotejima Is., K. IKEDA lgt. (New to Tokunoshima Is., Okinawa Is., Ishigakijima Is. and Iriomotejima Is.)

Host plant: *Mallotus japonicus* (THUNBERG) (confirmed by K. IKEDA on Iriomotejima Is.).

Agrilus ohmomoi sp. nov.

(Figs. 8. 27)

Body somewhat robust; above black with slight aeneo-greenish tinge; beneath entirely black; antennae and legs black with slight aeneous tinge.

Head narrower than the base of pronotum; vertex longitudinally impressed at the middle, feebly but distinctly prominent on each side of median impression, longitudinally and obsoletely rugoso-punctate; frons slightly longer than wide, about 1.1 times as long as wide between eyes, slightly depressed just below vertex, transversely and obsoletely rugoso-punctate, clothed with semirecumbent and cinereous hairs in frontal half, with the pores just above antennal cavities transverse and profound; eyes subparallel in frontal aspect, with the inferior rims slightly but distinctly sinuate; clypeal suture transverse, slightly carinate; clypeus transverse, about 1.5 times as wide as long between antennal cavities, with the anterior margin slightly and arcuately emarginate at the middle; antennal cavities large, with the posterior margin carinate; antennae eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, about 1.2 times as long as the second, which is equally stout to the first, about 1.2 times as long as the third, the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.4 times as wide as long, widest at the middle; sides evenly arcuate, but they are slightly sinuate before posterior angles; anterior margin bisinuate, with the median lobe arcuately produced; posterior margin bisinuate, with the median lobe subtruncate before scutellum; anterior angles acute and produced in dorsal aspect, acute and abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae strongly sinuate, strongly arcuate in posterior half, then sinuously and closely approximate to marginal carinae, traceable to the posterior three-fourths; marginal carinae slightly sinuate; submarginal carinae subparallel to and moderately distant from marginal ones in anterior half, then gradually approximate, and connected with them before posterior angles; disc convex, slightly and transversely depressed behind the median lobe of the anterior margin, feebly depressed just before scutellum, longitudinally depressed along prehumeral carinae; surface transversely rugoso-punctate, clothed with inconspicuous hairs, which become longer laterally and medially. Scutellum with a transverse carina; the part before the carina strongly declivous in front; the part behind the carina with a median projection triangularly produced posteriorly.

Elytra about 2.6 times as long as wide, about 3.6 times as long as pronotum, and widest at the anterior three-fifths; sides rounded at humeri, slightly convergent to anterior two-fifths, expanded and swollen near the middle, then convergent to the tips, which are conjointly and broadly rounded, and finely dentate; basal margins arcuately carinate, with the lobes subtriangularly produced; sutural margin slightly elevated except for anterior fifth; lateral margins unarmed except for the part near the apices, where they are finely dentate; humeri without humeral carinae; disc transversely and rather strongly depressed along basal margins, longitudinally deplanate along suture in anterior half; surface evenly and obsoletely imbricato-punctate, evenly clothed with semirecumbent, cinereous hairs, but the hairs sometimes become sparser at the middle.

Body beneath clothed with fine, cinereous hairs. Prosternum convex, very obsoletely rugoso-punctate; gular lobe with the anterior margin arcuately but very slightly emarginate; prosternal process constricted between anterior coxal cavities, tricuspidate at the apex, with the lateral projections short and rounded at the tips, the median one long and sharply produced posteriorly, but it is rounded at the tip. Abdomen beneath finely punctured; last ventral segment broadly rounded at the apex. Pygidium distinctly and longitudinally carinate at the middle, and rounded at the apex. Posterior tarsi shorter than posterior tibiae, with the first segment about as long as the following three united. Claws simply cleft.

Length: 4.5 mm; width: 1.2–1.5 mm.

Host plant: Unknown.

Holotype: ♂, Akane Rindô, Haranomachi, Fukushima Pref., 17. VI. 1979, S. Ohmomo lgt. Allotype: ♀, Akasai, Hyôgo Pref., 24. VI. 1979, M. Tôyama lgt. Paratypes: 1 ♂, Eda, Iwaki City, Fukushima Pref., 15. VII. 1978, S. Ohmomo lgt.; 1 ♂, Yokokawa-Akane Rindô, Haranomachi City, Fukushima Pref., 16. VII. 1978, S. Ohmomo lgt.; 1 ♂, Eda, Iwaki City, Fukushima Pref., 24. VII. 1982, S. Ohmomo lgt.; 1 ♀, Eda, Iwaki City, Fukushima Pref., 6. VIII. 1982, S. Ohmomo lgt.; 1 ♂, Okuhanazono, Ibaraki Pref., 8. VII. 1979, A. Nishiyama lgt.; 1 ♀, Kowakidani, Hakone, Kanagawa Pref., 22. VII. 1982, S. Saitoh lgt.; 1 ♀, Rokkoku Pass, Kanagawa Pref., 16. VII. 1979, M. Tao lgt.; 1 ♂, Akasai, Hyôgo Pref., 24. VI. 1979, M. Tôyama lgt.; 1 ♀, Mt. Ohboshi, Tsushima Is., 8–9. VI. 1974, T. Akashi lgt.; 3 ♀♀, Mt. Ohboshi, Tsushima Is., 5–9. VII. 1983, H. Makihara lgt.

Remarks: This new species is closely allied to *A. nakanei* Y. Kurosawa, 1963, but can be distinguished from it by the following characteristics: 1) prehumeral carinae traceable to posterior three-fifths, while in *A. nakanei*, they are traceable to the anterior angles; 2) elytron without dark band in the middle, while in *A. nakanei*, it bears a dark band in the middle.

Agrilus okinawensis MIWA, 1933

Agrilus okinawensis MIWA, 1933, Trans. nat. Hist. Soc. Formosa, **23**: 7.

Specimen examined: 1 ♀, Tomori, Miyakojima Is., 2. V. 1976 (host out), R. TOYOSHIMA lgt. (New to Miyakojima Is.)

Host plant: *Pongamia pinnata* (L.) MERRILL.

Distribution: Miyakojima Is., Ishigakijima Is., Iriomotejima Is. and Haterumajima Is.

Agrilus okinawensis shiozakii subsp. nov.

(Fig. 28)

Distinguished from subsp. *okinawensis* MIWA by the following characteristics: 1) pronotum dark wine-red and mat, while in subsp. *okinawensis*, it is bright copper-red and lustrous; 2) elytra evenly covered with fine, cinereous hairs, while in subsp. *okinawensis*, they are covered with fine, cinereous hairs except for the sutural parts in the middle.

Host plant: *Hibiscus* sp. (confirmed by Y. & K. SHIOZAKI on Ikeijima Is.).

Holotype: ♂, Tamagusuku, Okinawa Is., 17. XI. 1963, H. HASEGAWA lgt. Allotype: ♀, Ikeijima Is., Okinawa Pref., 23. VII. 1982, Y. & K. SHIOZAKI lgt. Paratypes: 1 ♂, Okinawa, Ryukyu, H. KINJO lgt.; 5 ♂♂, 2 ♀♀, same data as allotype; 1 ♀, Chinen, Okinawa Is., 25. V. 1980, K. DEGUCHI lgt.; 1 ♀, Chinen, Okinawa Is., 15. V. 1981, K. DEGUCHI lgt.

Remarks: I examined two specimens of this species from Lan-Hsu Is. off Taiwan. They could not be separated from this new subspecies.

Specimens examined: 1 ♂, 1 ♀, Kotosho, Taiwan, IV. 1936 (T. KANO collection).

Agrilus yamawakii Y. KUROSAWA, 1957

Agrilus yamawakii Y. KUROSAWA, 1957, Bull. natn. Sci. Mus., Tokyo, **3**: 193–194.

Specimens examined: 1 ♂, 1 ♀, Mt. Yuwandake, Amami-Oshima Is., 21. VI. 1978, T. OGASAWARA lgt. (New to Amami-Oshima Is.)

Agrilus auroapicalis ishigakianus subsp. nov.

(Fig. 29)

Agrilus auroapicalis: Y. KUROSAWA, 1974, Coleopt. News, (17/18): 3–4.

Distinguished from the nominotypical race from Taiwan by the following characteristics: 1) body above dark aeneous with violaceous tinge, while in subsp. *auroapicalis*, it is entirely black with slight violaceous tinge; 2) elytra with slight aeneous tinge near apices, while in subsp. *auroapicalis*, they have distinctly aeneous tinge near apices.

Holotype: ♂, Mt. Omotodake, Ishigakijima Is., IV. 1972, S. MIKAGE lgt. Allotype: ♀, Mt. Omotodake, Ishigakijima Is., 9–25. VI. 1972, M. KUBOKI lgt. Paratype: 1 ♀, Mt. Omotodake, Ishigakijima Is., 14. V. 1973, K. SUGINO lgt.

Agrilus yakushimensis sp. nov.

(Figs. 9, 30)

Body small, subcylindrical; above dark aeneous; body beneath black with slight aeneous tinge; antennae and legs slightly darker than body above.

Head slightly narrower than the base of pronotum; vertex longitudinally impressed at the middle, slightly convex on each side of the median impression; frons about as long as wide between eyes, slightly prominent in dorsal aspect, longitudinally and distinctly impressed for a short distance below vertex at the middle, transversely grooved along posterior margins of antennal cavities, transversely rugoso-punctate, evenly clothed with semirecumbent, cinereous hairs; eyes slightly converging below in frontal aspect, with the inferior rims distinctly sinuate; clypeal suture transverse, not carinate; clypeus about as long as wide between antennal cavities, with the anterior margin arcuately emarginate at the middle; antennal cavities large, with the posterior margins carinate; antennae rather lax, eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, about 1.2 times as long as the second, which is equally stout and subglobular to the first, the third rather slender, slightly shorter than the second, the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.4 times as wide as long, widest just behind the middle; sides somewhat arcuate, slightly expanded near the middle, then convergent to and slightly sinuate just before posterior angles; anterior margin bisinuate, with the median lobe arcuately produced; posterior margin trisinuate, with the median lobe arcuately but slightly emarginate before scutellum; anterior angles acute and produced in dorsal aspect, abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae arcuate, extending to the middle, where they are connected with the marginal ones; marginal carinae sharply defined throughout, slightly sinuate though arcuately abased just behind anterior angles; submarginal carinae moderately distant from marginal ones in anterior half, then approximate, and connected with them at the posterior fifth; disc convex, with a median depression just before scutellum; surface transversely rugoso-punctate, clothed with inconspicuous and cinereous hairs along all the margins. Scutellum with a transverse carina, the part before the carina subpentagonal, the median projection sharply produced posteriorly.

Elytra about 2.9 times as long as wide, about 3.9 times as long as pronotum, and widest just behind the middle; sides obtuse at humeri, slightly convergent to the anterior three-eighths, expanded and swollen near the middle, and then convergent to the tips, which are separately rounded and finely dentate; basal margins carinate, with the lobes subtriangularly produced; sutural margin slightly elevated in posterior third; lateral margins unarmed except for the parts near apices, where they are finely dentate; humeri not prominent, without humeral carinae; disc rather strongly depressed basally, longitudinally deplanate along the suture; surface evenly and densely rugoso-punctate, covered with semirecumbent, silver hairs except for the areas along the sides, which are clothed with very inconspicuous, short, blackish hairs.

Body beneath clothed with fine, cinereous hairs, those on the median part of prosternum being slightly longer. Prosternum convex, densely but obsoletely rugoso-punctate; gular lobe bilobed, with the anterior margin arcuately emarginate; prosternal process subpentagonal, slightly constricted between anterior coxal cavities, then attenuate to the tip. Abdomen beneath very finely punctured; last ventral segment rounded at the apex. Pygidium longitudinally and distinctly carinate at the middle, longitudinally depressed at both sides of the carina, and rounded at the apex. Posterior tarsi distinctly shorter than posterior tibiae, with the first segment longest, about as long as the following three united. Claws simply cleft.

Length: 4.0–5.8 mm; width: 1.2–1.7 mm.

Host plant: Unknown.

Holotype: ♂, Miyanoura, Yakushima Is., 30. VII. 1982, T. HATAYAMA lgt. Allotype: ♀, same data as holotype. Paratypes: 1 ♀, Miyanoura, Yakushima Is., 15. VII. 1971, J. KOMIYA lgt.; 5 exs , Kuromi, Yakushima Is., 3. VIII. 1972, O. TAMURA lgt.; 3 exs., Okawa, Yakushima Is., 13–14. VII. 1973, A. WATANABE lgt.; 10 exs., Miyanoura, Yakushima Is., 28. VII. 1974, T. MIKAGE lgt.; 1 ♀, Miyanoura, Yakushima Is., 29. VII. 1974, T. MIKAGE lgt.; 2 exs., Okawa, Yakushima Is., 21. VII. 1974, T. KOBAYASHI lgt.; 3 exs., Okawa, Yakushima Is., 14. VII. 1978, Y. ODA lgt.; 2 exs., Miyanoura, Yakushima Is., 22. VII. 1969, H. AKIYAMA lgt.; 1 ♂, Shiratani, Yakushima Is., 26. VII. 1973, T. KOBAYASHI lgt.; 1 ♀, Miyanoura, Yakushima Is., 21. VII. 1973, T. KOBAYASHI lgt.; 1 ♀, Okawa, Yakushima Is., 28. VII. 1978, H. MAKIHARA lgt.; 1 ♂, same data as holotype; 1 ♀, Cape Nagata, Yakushima Is., 3. VIII. 1982, T. HATAYAMA lgt.; 1 ♀, Teuchi, Shimo-koshiki-jima Is., 5. VIII. 1975, H. MAKIHARA lgt.

Remarks: This new species is allied to *A. amamioshimanus* Y. KUROSAWA, 1964, but differs from it in the following characteristics: 1) body slightly larger; 2) head longitudinally and distinctly impressed medially below vertex, while in *A. amamioshimanus*, it is not impressed; 3) elytra distinctly deplanate along suture in anterior half, while in *A. amamioshimanus*, they are slightly deplanate.

Agrilus watanabei sp. nov.

(Figs. 10, 31)

Closely similar to *A. yakushimensis* sp. nov., but differs from it in the following characteristics: 1) body smaller, entirely black with slight violaceous tinge, while in *A. yakushimensis*, it is dark aeneous; 2) head rather strongly produced in dorsal aspect, while in *A. yakushimensis*, it is slightly produced; 3) antennae compact, instead of lax: 4) pronotum with the anterior margin distinctly narrower than the posterior, while in *A. yakushimensis*, it is about as wide as the posterior; 5) prosternum with a gular lobe strongly and roundly emarginate, while in *A. yakushimensis*, it is slightly and arcuately emarginate.

Length: 4.0 mm; width: 1.0 mm.

Host plant: Unknown.

Holotype: ♂, Okawa, Yakushima Is., 12. VII. 1973, A. WATANABE lgt.

Agrilus deguchii sp. nov.

(Figs. 11, 32)

Body somewhat robust, entirely aeneous, slightly lustrous; body beneath brighter than above; antennae and legs darker.

Head slightly narrower than the base of pronotum; vertex longitudinally but obsoletely impressed at the middle, longitudinally rugoso-punctate; frons slightly broader than long between eyes, evenly rugoso-punctate, impressed medially for a short distance below vertex, transversely grooved along the posterior margins of antennal cavities, evenly and sparsely covered with semirecumbent, cinereous hairs; eyes converging below in frontal aspect, with the inferior rims distinctly sinuate; clypeal suture transversely and obsoletely carinate; clypeus distinctly broader than long between antennal cavities, about 1.5 times as wide as long, with the anterior margin arcuately emarginate at the middle; antennal cavities large, with the posterior margins obsoletely carinate; antennae rather lax, each eleven-segmented, serrate from the fourth segment, with the first segment stout, about 1.3 times as long as the second, which is stout and subglobular, the third less stout, slightly shorter than the second, the fourth subtriangular, about as long as second.

Pronotum transverse, about 1.3 times as wide as long, widest just before the middle; sides arcuately produced though slightly sinuate before posterior angles; anterior margin bisinuate, with the median lobe arcuately produced; posterior margin trisinuate, narrower than the anterior, with the median lobe arcuately emarginate before scutellum; anterior angles acute and rather strongly produced in dorsal aspect, abased in lateral aspect; posterior angles obtuse in dorsal aspect; prehumeral carinae sinuate, broadly rounded in posterior half, then closely approximate to marginal carinae, and connected with them just behind anterior angles; marginal carinae subparallel to and moderately distant from marginal carinae in anterior third, then gradually approximate posteriorly, and connected with them at the posterior fourth; disc convex, with the median depression before scutellum, with lateral depressions along prehumeral carinae; surface evenly but sparsely covered with short, cinereous hairs.

Elytra about 2.7 times as long as wide, about 4.0 times as long as pronotum, and widest just behind the middle; sides rounded at humeri, slightly convergent to the anterior three-tenths, expanded and swollen near the middle, then convergent to the tips, which are separately rounded and finely dentate; humeri not prominent, without humeral carinae; basal margins carinate, with the lobes subtriangularly produced; sutural margin slightly elevated in posterior three-fifths; lateral margins unarmed except for the apical parts, which are finely dentate; disc with the basal depressions rather large, the sutural area longitudinally depressed for a short distance behind scutellum; surface evenly rugoso-punctate, and evenly and entirely covered with semirecumbent, cinereous hairs.

Body beneath clothed with semirecumbent, cinereous hairs. Prosternum convex, obsoletely rugoso-punctate; gular lobe bilobed, with the anterior margin arcuately emarginate at the middle; prosternal process distinctly declivous posteriorly, subparallel between anterior coxal cavities, then attenuate to the tip, which is narrowly rounded. Abdomen beneath with the last ventral segment broadly rounded at the apex. Pygidium with the median part obsoletely carinate. Posterior tarsi shorter than posterior tibiae; first segment slightly longer than the following three united. Claws simply cleft.

Length: 4.8–6.0 mm; width: 1.2–1.7 mm.

Host plant: Unknown.

Holotype : ♂, Kominato, Amamioshima Is., 21. V. 1981, T. NOGAMI lgt. Allotype: ♀, Yanma, Amamioshima Is., 28. VI. 1978, A. WATANABE lgt. Paratypes: 2 ♂♂, 1 ♀, same data as holotype; 1 ♀, Sueyoshi, Naha City, Okinawa Is., 17. V. 1977, K. DEGUCHI lgt.; 1 ♂, 1 ♀, Sueyoshi, Okinawa Is., 11. V. 1981, K. DEGUCHI lgt.; 1 ♀, Mt. Ohyama, Kumejima Is., 25. VI. 1977, T. TSUTSUMI lgt.; 2 ♂♂, 2 ♀♀, Tonogusuku, Ishigaki City, Ishigakijima Is., 5. V. 1984, K. IHA lgt.

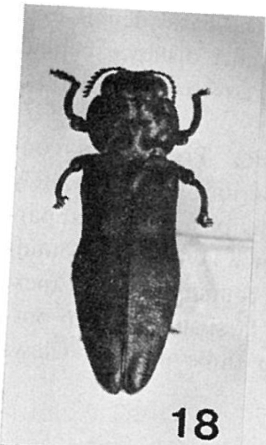
Remarks: This new species is allied to *A. amamioshimanus* Y. KUROSAWA, 1964, and *A. yasumatsui* Y. KUROSAWA, 1964, but can be distinguished from them by the following points: elytra entirely covered with cinereous hairs, while in *A. amamioshimanus* and *A. yasumatsui*, they are covered with cinereous hairs except for the areas along the sides.

Agrilus yonahaensis sp. nov.

(Figs. 12, 33)

Body small, subcylindrical; above aeneous; beneath black with slight aeneous tinge; antennae and legs concolorous with body beneath.

Head slightly narrower than the base of pronotum; vertex distinctly and longitudinally impressed at the middle, longitudinally rugoso-punctate; frons narrow, about 1.2 times as long as wide between eyes, slightly prominent in dorsal aspect, distinctly and longitudinally impressed for a short distance below vertex at the middle, transversely grooved just above the posterior margins of antennal cavities, densely rugoso-punctate, clothed with semirecumbent, cinereous hairs along eyes and in front; eyes large, subparallel in frontal aspect, with the inferior rims slightly sinuate; clypeal suture transversely carinate; clypeus about 1.3 times as wide as long between antennal cavities, with the anterior margin almost straight; antennal cavities large, with the posterior margins carinate; antennae rather lax, eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, and about 1.3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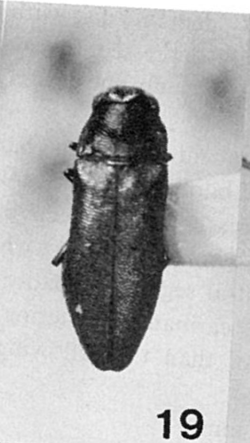
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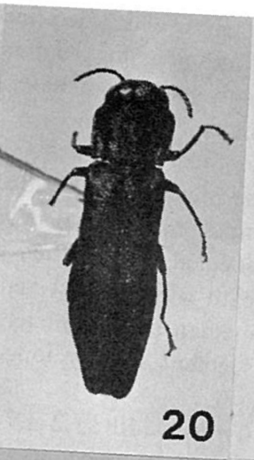
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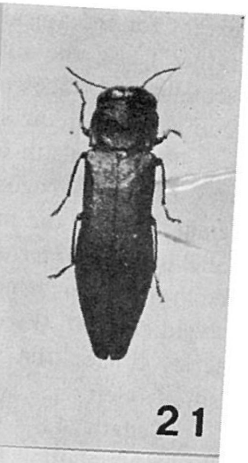
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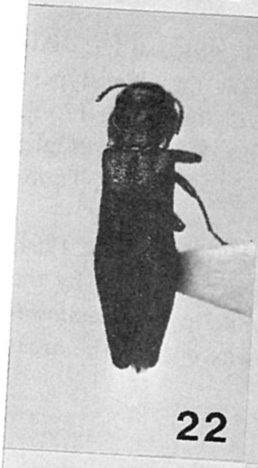
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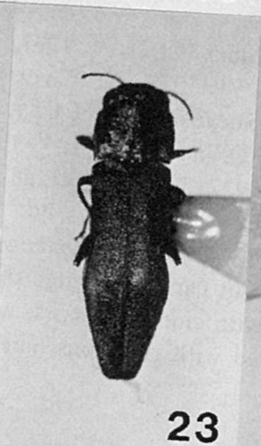
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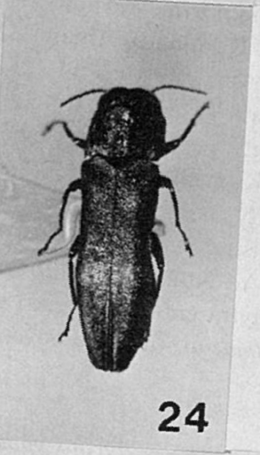
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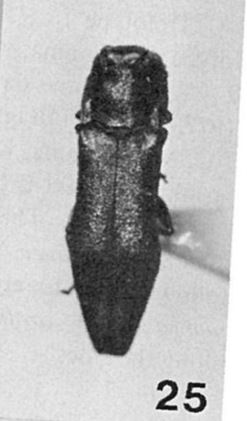
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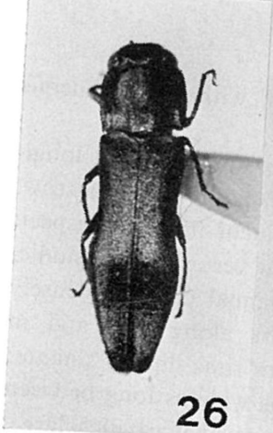
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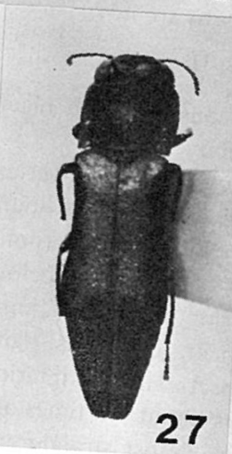
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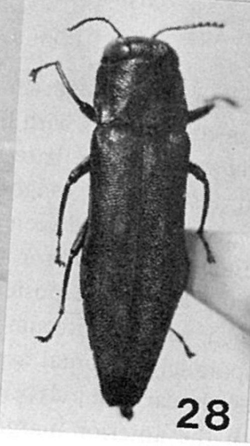
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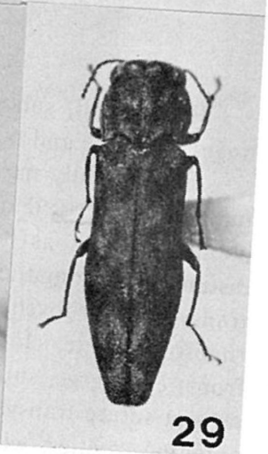
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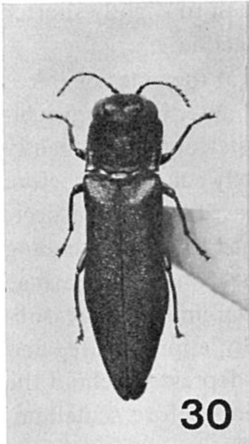
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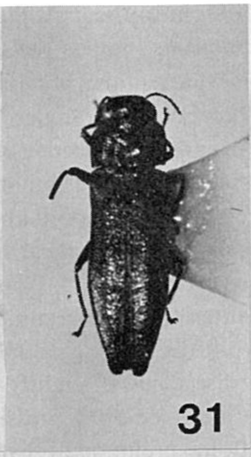
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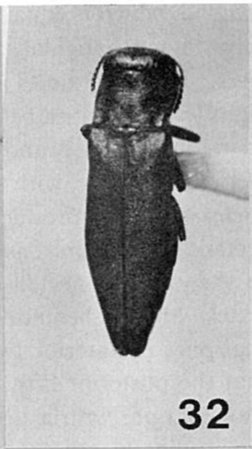
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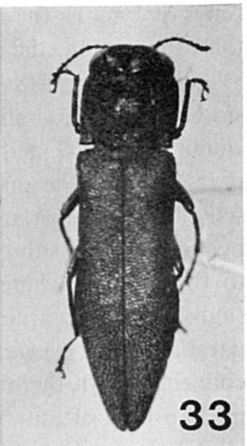
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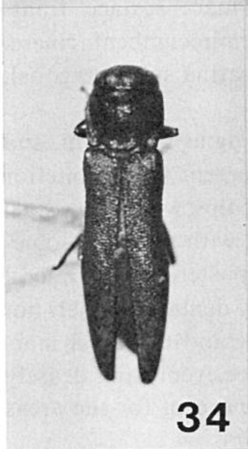
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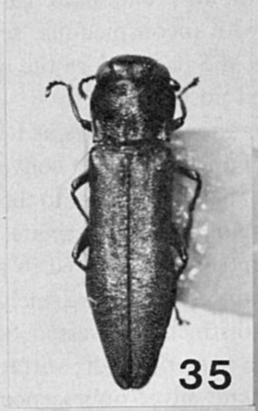
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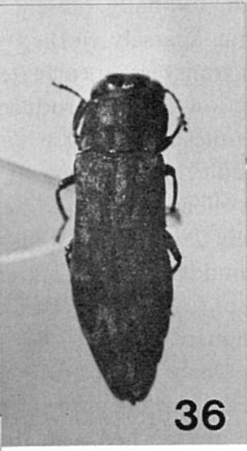
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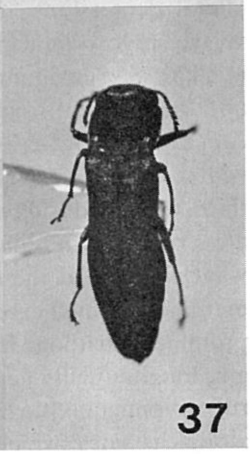
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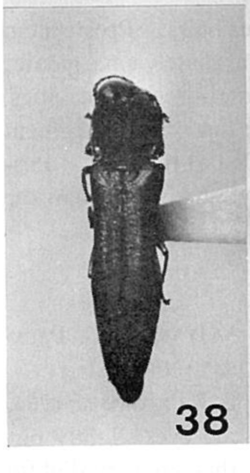
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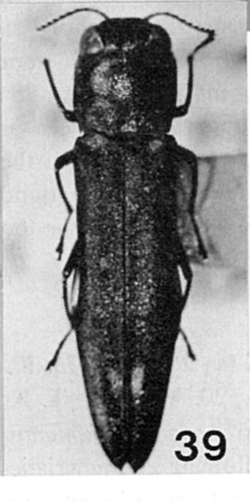
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Figs. 18–39. —— 18, *Toxoscelus matobai* sp. nov.; 19, *Agrilus hirashimai yayeyamaensis* subsp. nov.; 20, *Agrilus suginoi* sp. nov.; 21, *A. imasakai* sp. nov.; 22, *A. yamajii* sp. nov.; 23, *A. nakanei* Y. KUROSAWA; 24, *A. euonymi* sp. nov.; 25, *A. yagii* sp. nov.; 26, *A. nishiyamai* sp. nov.; 27, *A. ohmomoi* sp. nov.; 28, *A. okinawensis shiozakii* subsp. nov.; 29, *A. auroapicalis ishigakianus* subsp. nov.; 30, *A. yakushimensis* sp. nov.; 31, *A. watanabei* sp. nov.; 32, *A. deguchii* sp. nov.; 33, *A. yonahaensis* sp. nov.; 34, *A. samuelsoni* sp. nov.; 35, *A. iriei* sp. nov.; 36, *A. aritai* sp. nov.; 37, *A. semivittatus* sp. nov.; 38, *A. hokkaidoensis* sp. nov.; 39, *A. auropictus ryukyuensis* subsp. nov.

times as long as the second, which is equally stout to the first, the third slightly shorter than the second, the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.3 times as wide as long, widest at the anterior third; sides arcuate, and slightly sinuate just before posterior angles; anterior margin bisinuate, with the median lobe arcuately and broadly produced; posterior margin slightly narrower than the anterior, trisinuate, with the median lobe arcuately emarginate before scutellum; anterior angles acute and produced in dorsal aspect, abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae arcuate, extending to the middle, where they are connected with the marginal ones; marginal carinae slightly sinuate, arcuately abased behind anterior angles; submarginal carinae subparallel to the marginal ones in anterior two-fifths, then gradually approximate, and connected with them at the posterior fifth; disc convex, slightly depressed behind the median lobe of anterior margin, with a distinct median depression before scutellum, lateral depressions longitudinally present along prehumeral carinae; surface transversely rugoso-punctate, sparsely clothed with inconspicuous, semirecumbent, cinereous hairs. Scutellum transversely carinate, the part before the carina subpentagonal, and the median projection sharply produced posteriorly.

Elytra about 2.7 times as long as wide, about 4.0 times as long as pronotum, and widest behind the middle; sides obtuse at humeri, slightly convergent to the anterior third, expanded and swollen near the middle, then convergent to the tips, which are separately rounded and finely dentate; basal margin arcuately carinate, with the lobes somewhat angulate at the middle; sutural margin slightly elevated in posterior half; lateral margins unarmed except for the parts near apices, which are finely dentate; humeri not prominent, without humeral carinae; disc distinctly depressed behind the basal margin, longitudinally deplanate along suture in posterior half; surface evenly and densely rugoso-punctate, covered with semirecumbent, silver pubescence except for the areas along the sides, which are clothed with inconspicuous, short hairs.

Body beneath sparsely clothed with recumbent and cinereous hairs. Prosternum convex; gular lobe bilobed, with the anterior margin slightly and arcuately emarginate; prosternal process declivous posteriorly, subparallel between anterior coxal cavities, then strongly attenuate to the tip. Abdomen beneath with the last ventral segment broadly rounded at the apex. Pygidium not carinate, and rounded at the apex. Posterior tarsi shorter than posterior tibiae; the first segment the longest, shorter than the following three united. Claws simply cleft.

Length: 4.6 mm; width: 1.1 mm.

Host plant: Unknown.

Holotype: ♂, Yonahadake, Okinawa Is., 25. VI. 1973, K. AKIYAMA lgt. Paratype: 1 ♂, Mt. Yonahadake, Okinawa Is., 30. VI. 1973, T. KOBAYASHI lgt.

Remarks: This new species is allied to *A. amamioshimanus* Y. KUROSAWA, 1964, but can be distinguished from it by the following characteristics: 1) eyes slightly but distinctly sinuate at the inferior rims, while in *A. amamioshimanus*, they are very slightly sinuate; 2) prehumeral carinae more strongly arcuate than in *A. amamioshimanus*; 3) gular lobe distinctly emarginate at the middle, while in *A. amamioshimanus*, it is only slightly emarginate.

Agrilus samuelsoni sp. nov.

(Figs. 13, 34)

Body small, subcylindrical, black with a slight aeneous tinge; antennae and legs black.

Head slightly narrower than the base of pronotum; vertex longitudinally impressed at the middle, longitudinally rugoso-punctate; frons slightly prominent in dorsal aspect, slightly narrower than long between eyes, longitudinally but obsoletely impressed for a short distance below vertex at the middle, transversely grooved along the posterior margins of antennal cavities, transversely rugoso-punctate, and clothed with semirecumbent, inconspicuous, cinereous hairs; eyes slightly converging below in frontal aspect, with the inferior rims slightly sinuate; clypeal suture transverse, distinctly carinate; clypeus about as long as wide between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large, with the posterior margins carinate; antennae rather lax, eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, about 1.1 times as long as the second, which is equally stout to the first, the third about 0.7 times as long as the second, and the fourth subtriangular, about as long as the third.

Pronotum transverse, about 1.3 times as wide as long, widest just before the middle; sides arcuate throughout; anterior margin bisinuate, with the median lobe broadly and arcuately produced; posterior margin slightly narrower than the anterior, trisinuate, with the median lobe slightly sinuate before scutellum; anterior angles acute and produced in dorsal aspect, sharply abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae sinuate, traceable to near anterior angles, where they are connected with marginal ones; marginal carinae sinuate; submarginal carinae extending to the anterior two-thirds, moderately distant from marginal ones in anterior half, then approximate to them posteriorly; disc convex, with a median depression posteriorly and lateral longitudinal depressions along prehumeral carinae; surface transversely rugoso-punctate, clothed with semirecumbent, inconspicuous, cinereous hairs medially and along all the margins. Scutellum transversely carinate, the part before the carina subquadrate, median projection sharply produced posteriorly.

Elytra about 3.1 times as long as wide, about 4.0 times as long as pronotum, and widest behind the middle; sides obtuse at humeri, slightly convergent to anterior three-tenths, expanded and swollen near the middle, then convergent to the tips, which are separately rounded and obsoletely dentate; basal margins carinate, with the lobes arcuately produced at the middle; sutural margin slightly elevated in posterior two-thirds; lateral margins unarmed except for apical parts, which are finely and obsoletely dentate; humeri not prominent, without humeral carinae; disc depressed behind the basal margin; surface coarsely and transversely rugoso-punctate, evenly and rather sparsely covered with semirecumbent, cinereous hairs.

Body beneath sparsely and evenly clothed with short, fine, cinereous hairs. Prosternum convex; gular lobe with the anterior margin arcuately but obsoletely emarginate at the middle; prosternal process slightly constricted between anterior coxal cavities, then strongly attenuate to the apex. Abdomen beneath with the first visible segment weakly depressed at the middle; the last one broadly rounded at the apex. Pygidium with an obsolete median carina, obsoletely and longitudinally depressed along the carina, rounded at the apex. Posterior tarsi distinctly shorter than posterior tibiae, with the first segment the longest, though shorter than the following three united. Claws simply cleft.

Length: 4.0–4.8 mm; width: 0.7–1.0 mm.

Host plant: Unknown.

Holotype: ♂, Mt. Ushikumori, Iriomote Is., 3–7. XI. 1963, G. A. Samuelson lgt. Allotype: ♀, Arakawa, Ishigakijima Is., 7. V. 1977, H. Hiramatsu lgt.

Agrilus iriei sp. nov.

(Figs. 14, 35)

Closely allied to *A. samuelsoni* sp. nov., but differing from it in the following characteristics: 1) body slightly robuster; 2) body above black with a slight greenish tinge, while in *A. samuelsoni*, it is black with a faint aeneous tinge; 3) clypeus distinctly narrower than in *A. samuelsoni*; 4) prehumeral carinae short, arcuate, and not conjoined with the marginal carinae, while in *A. samuelsoni*, they are long, sinuate, and connected with the marginal ones; 5) elytra separately and broadly rounded at the tips, while in *A. samuelsoni*, they are separately and narrowly rounded; 6) elytra deplanate along the suture, while in *A. samuelsoni*, they are very obsoletely deplanate along the suture.

Length: 3.8–4.2 mm; width: 0.9–1.1 mm.

Host plant: Unknown.

Holotype: ♂, Mt. Omotodake, Ishigakijima Is., 17. IV. 1973, H. Irie lgt. Paratype: 1 ♂, Mt. Omotodake, Ishigakijima Is., 16. IV. 1973, H. Irie lgt.

Agrilus aritai sp. nov.

(Figs. 15, 36)

Body rather robust; above aeneous; beneath black with slight violaceous tinge; antennae and legs black with aeneous tinge.

Head slightly narrower than the base of pronotum; vertex longitudinally and obsoletely impressed at the middle, distinctly rugoso-punctate; frons slightly broader than long between eyes, longitudinally impressed at the middle, slightly gibbose on each side of the impression, transversely and profoundly grooved along the posterior margins of antennal cavities, longitudinally rugoso-punctate just below vertex, transversely rugoso-punctate on the other parts, clothed with semirecumbent, cinereous hairs on frontal half; eyes slightly converging below in frontal aspect, with the inferior rims feebly sinuate; clypeal suture transverse; clypeus broad, about 1.8 times as wide as long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large, with the posterior margins carinate; antennae rather lax, eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, and about 1.2 times as long as the second, which is equally stout and subglobular to the first, the third the shortest, the fourth subtriangular, about 1.2 times as long as the third.

Pronotum transverse, about 1.4 times as wide as long, widest just behind the middle; sides slightly sinuate; anterior margin bisinuate, with the median lobe broadly and arcuately produced; posterior margin slightly narrower than the anterior, somewhat bisinuate, with the median lobe subtruncate before scutellum; anterior angles acute and produced in dorsal aspect, sharply abased in lateral aspect; prehumeral carinae arcuate, extending to the middle, not connected with the marginal ones, which are distinctly sinuate; submarginal carinae subparallel and moderately distant to the marginal ones in anterior third, then gradually approximate posteriorly, and connected with them just before posterior angles; disc convex, with two median depressions behind the anterior lobe and before scutellum respectively, lateral depressions present along prehumeral carinae; surface transversely rugoso-punctate, evenly but sparsely covered with fine, short, cinereous hairs, rather densely clothed with semirecumbent, silver-whitish hairs in median depressions. Scutellum with a transverse carina, the part before the carina being subpentagonal, and the median projection sharply produced posteriorly.

Elytra about 2.6 times as long as wide, about 4.2 times as long as pronotum, and widest just behind the middle; sides rounded at humeri, slightly convergent to the anterior fifth, expanded and swollen near the middle, then gradually convergent to the tips, which are separately rounded and distinctly dentate; basal margins sinuate, with the lobes arcuately produced at the middle; sutural margin slightly elevated in posterior three-fifths; lateral margins unarmed except for apical parts, which are finely but distinctly dentate; humeri slightly prominent, without humeral carinae; disc distinctly depressed along the basal margin; surface evenly imbricato-punctate, ornamented with markings or bands consisting of semirecumbent silver-whitish hairs, arranged as follows: some irregular bands or markings in basal half; a strongly zigzaged band at the apical third; a slightly zigzaged band just before the apex.

Body beneath rather uniformly clothed with fine, semirecumbent, cinereous hairs. Prosternum convex; gular lobe broadly produced, with the anterior margin evenly arcuate; prosternal process slightly expanded just behind anterior coxal cavities, then arcuately attenuate to the tip, which is pointed posteriorly. Abdomen beneath finely and sparsely punctate, with the last ventral segment rounded at the apex. Pygidium longitudinally carinate, the carina projecting at the apex. Posterior tarsi with the first segment about as long as the following three united. Claws simply cleft.

Length: 7.0 mm; width: 2.0 mm.

Host plant: Unknown.

Holotype: ♀, Hirano, Ishigakijima Is., 30. VIII. 1965, Y. Arita lgt.

This new species is closely allied to *A. alesi* Obenberger, 1935, but can be distinguished by the following characteristics: 1) body smaller than in *A. alesi*; 2) elytral markings different from those of *A. alesi.*

Agrilus semivittatus sp. nov.

(Figs. 16, 37)

Body small, subcylindrical, entirely black with slight greenish tinge.

Head slightly narrower than the base of pronotum; vertex longitudinally but slightly impressed at the middle; frons longer than wide between eyes, longitudinally impressed below vertex at the middle, longitudinally rugoso-punctate below vertex, transversely rugoso-punctate anteriorly, clothed with fine, cinereous hairs; eyes slightly converging below in frontal aspect, with the inferior rims slightly sinuate; clypeal suture transversely carinate; clypeus broader than long between antennal cavities, with the anterior margin arcuately and rather strongly emarginate; antennal cavities large, with the posterior margins carinate, the pores just above posterior carinae profound and transverse; antennae eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, and about 1.1 times as long as the second, which is equally stout and subglobular to the first, the third the shortest, the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.3 times as wide as long, widest just behind the middle; sides rounded just behind anterior angles, subparallel in anterior third, slightly expanded near the middle, then convergent to posterior angles; anterior margin bisinuate, with the median lobe broadly and arcuately produced; posterior margin slightly narrower than the anterior, somewhat trisinuate, with the median lobe slightly emarginate before scutellum; anterior angles acute and produced in dorsal aspect, sharply abased in lateral aspect; posterior angles obtuse in dorsal aspect; prehumeral carinae rather strongly sinuate, arcuatley rounded in posterior third, sinuously approximate to the marginal ones near the middle, then closely approximate anteriorly, and traceable to near anterior angles, where they are connected with them; marginal carinae sinuate; submarginal carinae subparallel to and moderately distant from marginal ones in anterior third, then gradually approximate posteriorly, and connected with them at the posterior fifth; disc convex, with two large depressions behind the anterior lobe and just before scutellum respectively, lateral longitudinal depressions present along prehumeral carinae; surface transversely imbricato-rugose, clothed with very inconspicuous, blackish hairs. Scutellum with a transverse carina, the part before the carina subpentagonal, median projection sharply produced posteriorly.

Elytra about 2.7 times as long as wide, about 4.0 times as long as pronotum, and widest just behind the middle; sides rounded at humeri, slightly convergent to the anterior two-fifths, expanded and swollen near the middle, then convergent again to the tips, which are separately rounded and finely dentate; basal margins sinuate, with the lobes arcuately produced at the middle; sutural margin slightly elevated in posterior two-fifths; lateral margins unarmed except near apices, where they are finely dentate; humeri without humeral carinae; disc with basal depressions along basal margins; surface densely imbricato-punctate, ornamented with semirecumbent, golden hairs in anterior half except for the areas along the sides, clothed with very inconspicuous, black hairs posteriorly and laterally.

Body beneath rather uniformly clothed with short, recumbent, cinereous hairs. Prosternum convex; gular lobe bilobed, with the anterior margin arcuately and slightly emarginate at the middle; prosternal process feebly expanded behind anterior coxal cavities, then roundly attenuate to the tip. Abdomen beneath with the last ventral segment rounded at the apex. Pygidium longitudinally carinate at the middle, and rounded at the apex. Posterior tarsi distinctly shorter than posterior tibiae, with the first segment slightly longer than the following three united. Claws simply cleft.

Length: 4.0–5.0 mm; width: 0.9–1.1 mm.

Host plant: Unknown.

Holotype: ♂, Mt. Konpira, Nagasaki City, Nagasaki Pref., 1. VII. 1954, S. IKUSHIMA lgt. Allotype: ♀, Uoaraigawa, Kunimi Town, Nagasaki Pref., 14. VII. 1979, S. IMASAKA lgt. Paratypes: 3 ♂♂, 1 ♀, same data as holotype.

Remarks: This new species is somewhat allied to *A. pilosovittatus* E. SAUNDERS, 1873, but can be distinguished from it by the difference in elytral ornamentation by pubescence.

Agrilus hokkaidoensis sp. nov.

(Figs. 17, 38)

Body slender, subcylindrical; above black with slight violaceous or greenish tinge; beneath black with slight violaceous tinge; antennae and legs concolorous with body beneath.

Head slightly narrower than the base of pronotum; vertex longitudinally rugoso-punctate; frons distinctly narrower than long between eyes, without median impression, transversely and profoundly grooved along the posterior margins of antennal cavities, transversely rugoso-punctate, uniformly clothed with semirecumbent, cinereous hairs; eyes large, converging below in frontal aspect, with the inferior rims slightly sinuate; clypeal suture transversely carinate; clypeus about as long as wide between antennal cavities, with the anterior margin arcuately but very slightly emarginate at the middle; antennal cavities large, with the posterior margins strongly carinate; antennae lax, eleven-segmented, serrate from the fourth segment, with the first segment stout, subglobular, and about 1.1 times as long as the second, which is equally stout and subglobular to the first, the third the shortest, the fourth subtriangular, about as long as the first.

Pronotum somewhat transverse, about 1.2 times as wide as long, widest just before the middle; sides sinuate, slightly expanded near the middle, then sinuously attenuate to posterior angles; anterior margin bisinuate, with the median lobe broadly and arcuately produced; posterior margin narrower than the anterior, trisinuate, with the median lobe slightly and arcuately emarginate before scutellum; anterior angles acute and produced in dorsal aspect, acute and sharply abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae arcuate, extending to the middle, where they are connected with the marginal ones; marginal carinae sharply defined, broadly sinuate; submarginal carinae subparallel to the marginal ones in anterior fourth, then gradually approximate posteriorly, and connected with them before posterior angles; disc convex, transversely depressed behind the anterior lobe, rather strongly depressed before scutellum, and longitudinally depressed along prehumeral carinae; surface transversely imbricato-rugose, clothed with very inconspicuous, short, blackish hairs. Scutellum transversely carinate; the part before the carina strongly declivous in front, and subpentagonal; the part behind the carina with a median projection sharply produced posteriorly.

Elytra about 3.3 times as long as wide, about 3.6 times as long as pronotum, and widest behind the humeri; sides slightly expanded behind the humeri, then sinuously convergent to the tips, though slightly expanded near the middle; tips separately rounded, finely dentate; basal margins arcuately carinate, with the lobes arcuately produced at the middle; sutural margin slightly elevated except for the portion behind scutellum; lateral margins unarmed except for the apical parts, which are finely dentate; humeri without humeral carinae; disc rather strongly depressed along the basal margin, longitudinally and rather strongly deplanate along the suture; surface transversely and densely imbricato-punctate, longitudinally ornamented with semirecumbent, fine, golden hairs along the suture from the basal depressions to the anterior two-thirds, also ornamented with semirecumbent, fine, golden hairs near apices, clothed with very inconspicuous, blackish hairs on the blackish parts.

Body beneath rather uniformly covered with short, recumbent, cinereous hairs. Prosternum convex; gular lobe bilobed, with the anterior margin arcuately emarginate at the middle; prosternal process distinctly expanded to behind anterior coxal cavities, distinctly bi-emarginate at the apex, distinctly and sharply pointed between the emarginations. Abdomen beneath with the last ventral segment rounded at the apex. Pygidium longitudinally carinate at the middle, and rounded at the apex. Posterior tarsi distinctly shorter than posterior tibiae, with the first segment about as long as the following three united. Claws simply cleft.

Length: 7.0 mm; width: 1.5 mm.

Holotype: ♂, Horoka, Hokkaido, 25. VII. 1969.

Remarks: This new species is allied to *A. marginicollis* E. SAUNDERS, 1873, but can be distinguished from it by the following characteristics: 1) body larger; 2) clypeus about as long as wide between antennal cavities, while in *A. marginicollis*, it is narrower than long; 3) pronotum broader than in *A. marginicollis*; 4) elytra separately rounded at the tips, while in *A. marginicollis*, they are conjointly and broadly rounded.

Agrilus auropictus ryukyuensis subsp. nov.

(Fig. 39)

Distinguished from the nominotypical race from Taiwan and the Japanese race, subsp. *kanohi* Y. KUROSAWA, 1954, by the following characteristics: elytra distinctly bluish tinged, while in the other races, they are not tinged blue.

Holotype: ♂, Shirahama, Iriomote Is., 29. III. 1965, H. YOKOYAMA lgt. Paratypes: 1 ♂, Shirahama, Iriomote Is., 4. IV. 1962, Y. ARITA lgt.; 1 ♂, Mt. Ushikumori, Iriomote Is., 7–10. XI. 1963, G. A. SAMUELSON lgt.; 1 ♂, Shirahama, Iriomote Is., 9. VI. 1972, H. IRIE lgt.; 1 ♂, Mt. Omotodake, Ishigaki Is., 24. VI. 1972, S. OKAJIMA lgt.

摘　　要

日本産クリタマムシ属 (*Toxoscelus*) の1新種，ナガタマムシ属 (*Agrilus*) の15新種4新亜種を記載し，あわせて台湾産ナガタマムシ属の1新種を記載した．また，日本よりナガタマムシ属の1種を新たに記録し，既知の数種について分布上の新知見を与えた．

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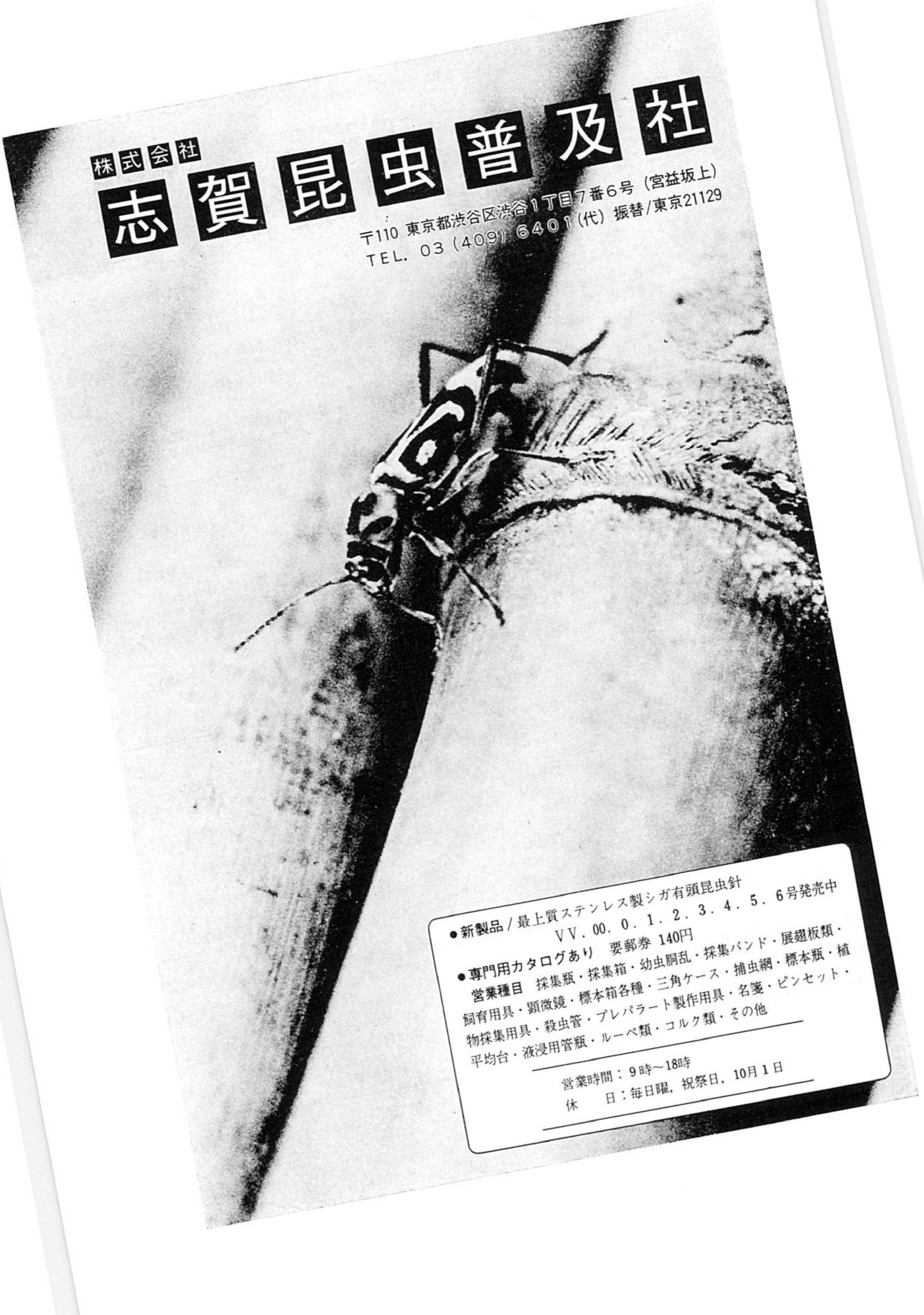株式会社
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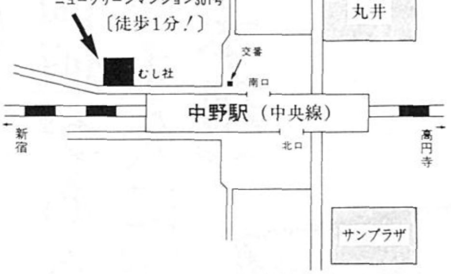

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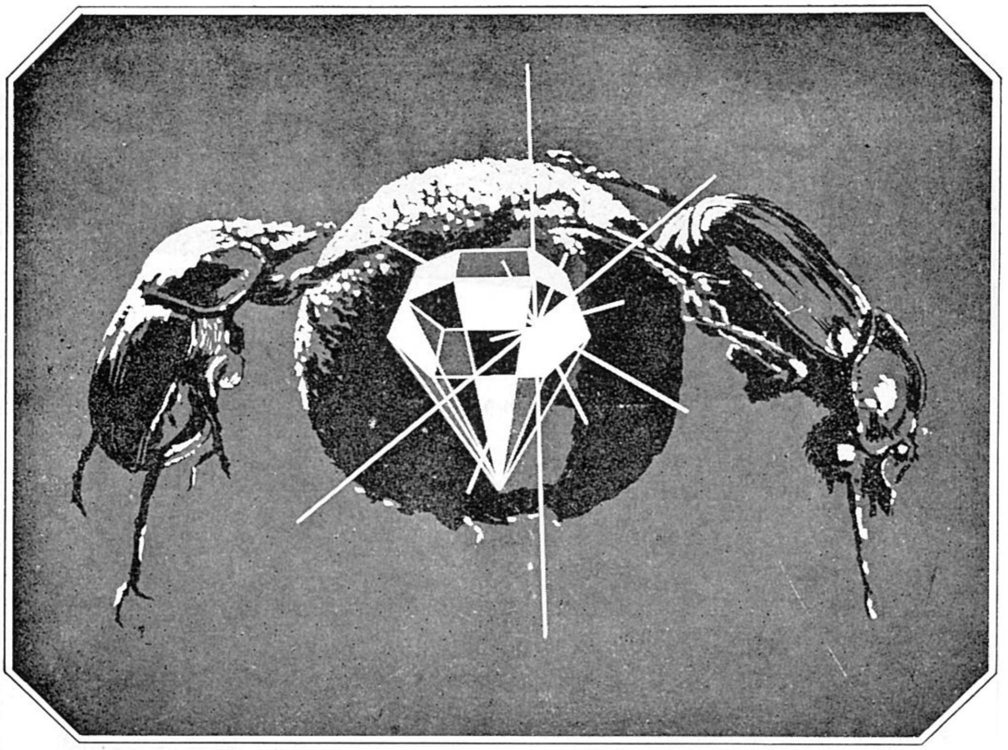

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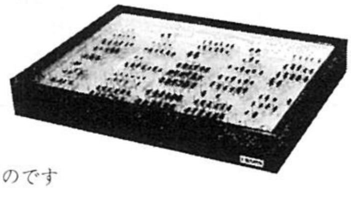

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